DEVELOPMENT OF REGIONAL IMPACT
(DRI #4120)

TRAFFIC STUDY
FOR
DC BLOX – ATL EAST DATA CENTER ON FARMER ROAD

ROCKDALE COUNTY, GEORGIA

Prepared for:

DC Blox
1040 Crown Point Parkway, Suite 560
Atlanta, GA 30338

Prepared By:

A&R Engineering Inc.
2160 Kingston Court, Suite O
Marietta, GA 30067
Tel: (770) 690-9255 Fax: (770) 690-9210
www.areng.com

April 19, 2024
A & R Project # 23-212

EXECUTIVE SUMMARY

Traffic impacts were evaluated for the proposed DC Blox – ATL East Data Center (DRI #4120) that will be located at 1726 & 1830 Farmer Road NW, Conyers in Rockdale County, Georgia. The development includes three industrial data center buildings with a combined 1,016,828 square feet and proposes two full access driveways, one on Lester Road and other on Farmer Road.

Existing and future operations during the AM peak hour (7:00 AM – 9:00 AM) and PM peak hour (4:00 PM – 6:00 PM) before and after completion of the project were analyzed at the following intersections:

1. Sigman Road at Farmer Road
2. Sigman Road at Lester Road
3. Farmer Road at Lester Road

Traffic Operations Summary

Table E1 below provides a summary of traffic operations for the "No-Build" and "Build" conditions for the year 2026 with and without system improvements. As per GRTA requirements, all approaches that do not meet the level-of-service (LOS) standard (considered failing) are highlighted in Table E1. Table E1 for "Build" conditions also includes the project's total added trip and the respective percentage of overall total "Build" condition approach traffic volume for all failing LOS approaches after all improvements are completed.

TABLE E1 – FUTURE INTERSECTION OPERATIONS AT FAILING APPROACHES

	Intersection	*No-Build Condition: LOS (Delay)*				*Build Condition: LOS (Delay)*									
		NO IMPROVEMENTS		SYSTEM IMPROVEMENTS		NO IMPROVEMENTS		SYSTEM IMPROVEMENT ONLY		SITE IMPROVEMENT		SITE VOLUMES AT FAILING APPROACH BUILD WITH IMPROVEMENTS		PRECENT SITE TRIPS OF TOTAL APPROACH TRIPS AT FAILING APPROACHES	
		AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
1	**Sigman Rd @ Farmer Rd** -Eastbound Approach -Westbound Approach -Northbound Approach -Southbound Approach	**B (10.3)** A (7.3) A (0.7) D (39.6) D (51.4)	**A (8.5)** A (7.3) A (0.8) D (41.6) D (53.7)			**B (12.0)** A (8.3) A (0.7) D (37.4) D (52.1)	**B (10.4)** A (9.0) A (0.9) D (38.2) D (51.6)	-	-	-	-	No failing approaches	No failing approaches	No failing approaches	No failing approaches
2	**Sigman Rd @ Lester Rd** -Eastbound Approach -Westbound Approach -Northbound Approach -Southbound Approach	**A (3.2)** A (0.2) A (4.1) D (48.2) D (49.8)	**A (6.6)** A (0.4) A (7.1) D (44.1) D (44.4)			**A (4.5)** A (0.2) A (4.8) D (47.7) D (46.7)	**A (7.3)** A (0.5) A (7.3) D (43.8) D (44.0)	-	-	-	-	No failing approaches	No failing approaches	No failing approaches	No failing approaches
3	**Farmer Rd @ Lester Rd** -Eastbound Approach -Westbound Approach -Northbound Left -Southbound Left	B (10.0) B (10.1) A (7.7) A (7.6)	B (10.5) B (10.2) A (7.4) A (7.5)			B (10.5) B (11.0) A (7.8) A (7.6)	B (11.1) B (10.9) A (7.5) A (7.5)	-	-	-	-	No failing approaches	No failing approaches	No failing approaches	No failing approaches
4	**Lester Rd @ Site Drwy 1** -Eastbound Left -Southbound Approach	-	-			A (7.4) A (8.9)	A (7.3) A (9.2)	-	-	-	-	No failing approaches	No failing approaches	No failing approaches	No failing approaches
5	**Farmer Rd @ Site Drwy 2** -Eastbound Approach -Northbound Left	-	-			A (9.4) A (7.6)	A (9.1) A (7.4)	-	-	-	-	No failing approaches	No failing approaches	No failing approaches	No failing approaches

*Delay exceeds 300 seconds

The results of future "Build" conditions traffic analysis indicate that the signalized intersections are operating at an overall levels-of-service "B" or better in the AM and PM peak hours. The stop-controlled approaches at un-signalized study intersections are operating at a levels-of-service "B" or better in the AM and PM peak hours.

Recommended System Improvements

Since the intersections are operating at the satisfactory level of service, no system improvements were identified from the "No-Build" condition analysis.

Recommendation for Site Access Configuration

The following access configuration is recommended for the proposed site driveway intersections.

Intersection 4: Lester Rd at Site Driveway 1

- One entering and one exiting lane
- Stop-sign controlled on the driveway approach with Lester Road remaining free flow.
- Deceleration Lane for entering traffic
- Provide / Confirm adequate sight distance per AASHTO standards

Intersection 5: Farmer Rd at Site Driveway 2

- One entering and one exiting lane
- Stop-sign controlled on the driveway approach with Farmer Road remaining free flow.
- Provide / Confirm adequate sight distance per AASHTO standards

TABLE OF CONTENTS

Item **Page**

Executive Summary **1**
Traffic Operations Summary 2
Recommended System Improvements 3
Recommendation for Site Access Configuration 3
Introduction **1**
Study Network Determination **2**
Existing Roadway Facilities **4**
Existing Bicycle and Pedestrian Facilities 5
Alternative Modes of Access 5
Unsignalized Intersections 6
Signalized Intersections 7
Existing 2024 Traffic Analysis **8**
Existing Traffic Volumes 8
Existing Traffic Operations 11
Project Description **12**
Site Plan 12
Planned Bicycle and Pedestrian Facilities 14
Potential Pedestrian and Bicycle Destinations 14
Planned Transit Facilities 15
Consistency with Adopted Comprehensive Plan 15
Future Land Use Map 15
Project Phasing 15
Trip Generation 16
Trip Distribution 16
Future 2026 Traffic Analysis **18**
Future “No-Build” Conditions 18
Annual Traffic Growth 18
Planned and Programmed Improvements in Study Area 18
Future “No-Build” Traffic Operations 20
Recommended System Improvements 20
Auxiliary Lane Analysis 21
Left Turn Lane Analysis 21
Deceleration Turn Lane Analysis 22
Future “Build” Conditions 23
Future “Build” Traffic Operations 25
Conclusions and Recommendations **27**
Recommended System Improvements 27
Recommendation for Site Access Configuration 27
Appendix

LIST OF TABLES

Item **Page**

Table E1 – Future Intersection Operations at Failing Approaches E-2
Table 1 – Level-of-service Criteria for Unsignalized Intersections 6
Table 2 – Level-of-service Criteria for Signalized Intersections 7
Table 3 – Existing Intersection Operations 11
Table 4 – Trip Generation 16
Table 5 – Future "No-Build" Intersection Operations 20
Table 6– GDOT Requirements for Left Turn Lanes 21
Table 7 – GDOT Requirements for Deceleration Lanes 22
Table 8 – Future "Build" Intersection Operations 25

LIST OF FIGURES

Item **Page**

Figure 1 – Location Map and Study Intersections 3
Figure 2 – Existing Weekday Peak Hour Volumes 9
Figure 3 – Existing Traffic Control and Lane Geometry 10
Figure 4 – Site Plan 13
Figure 5 – Outer Leg Trip Distribution and Site Generated Peak Hour Volumes 17
Figure 6 – Future (No-Build) Weekday Peak Hour Volumes 19
Figure 7 – Future (Build) Weekday Peak Hour Volumes 24
Figure 8 – Future Traffic Control and Lane Geometry 26

INTRODUCTION

The purpose of this study is to determine the traffic impact for the proposed DC Blox – ATL East Data Center (DRI #4120) that will be located at 1726 & 1830 Farmer Road NW, Conyers in Rockdale County, Georgia. The traffic analysis evaluates the current operations and the future conditions with the traffic generated by the development. The development includes three industrial data center buildings with a combined 1,016,828 square feet.

The development proposes two full access driveways, one on Lester Road and other on Farmer Road.

The AM and PM peak hours have been analyzed in this study. In addition to the site access points, this study includes the evaluation of traffic operations at the intersections of:

1. Sigman Road at Farmer Road
2. Sigman Road at Lester Road
3. Farmer Road at Lester Road

Recommendations to improve traffic operations have been identified as appropriate and are discussed in detail in the following sections of the report.

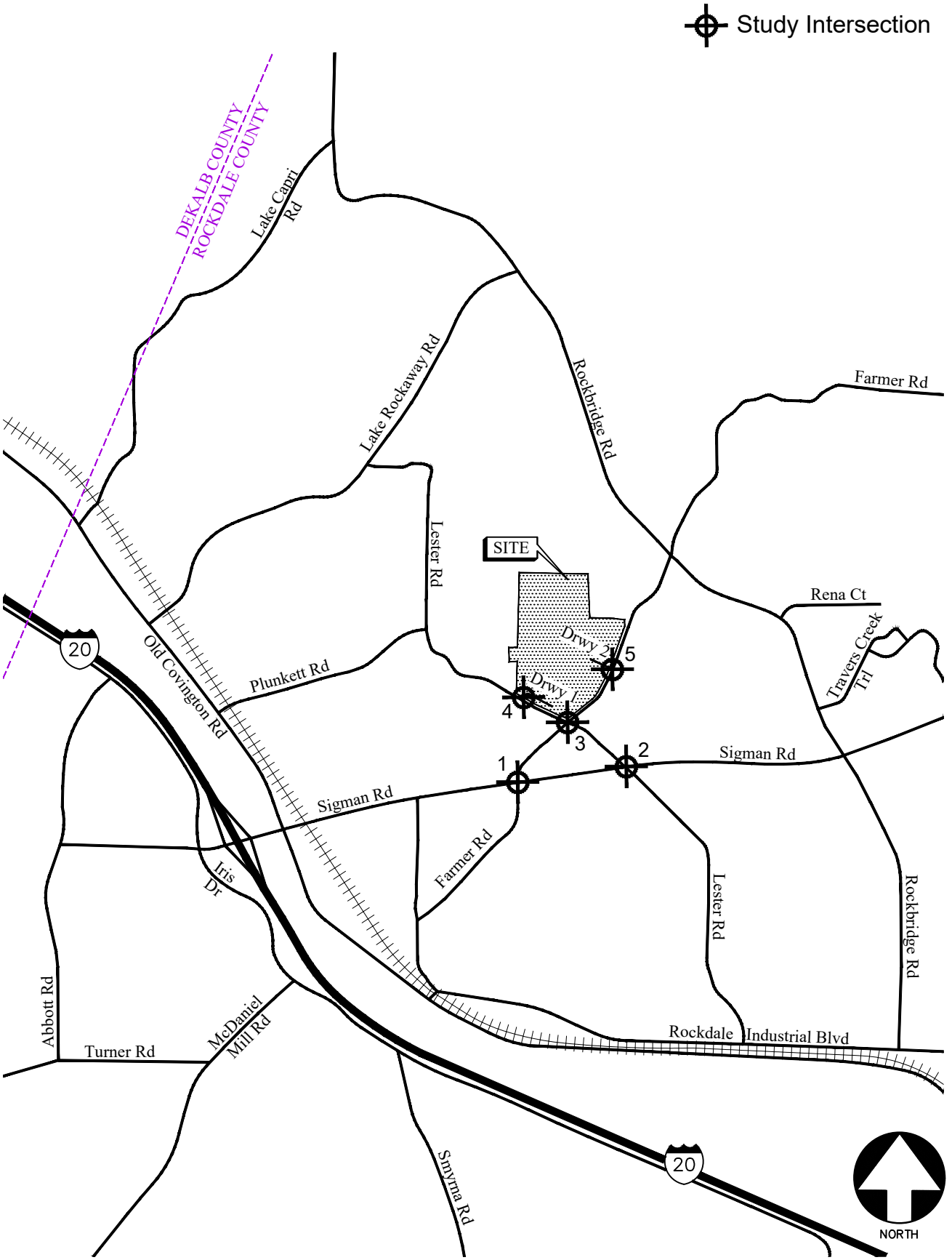
STUDY NETWORK DETERMINATION

The study network was determined by evaluating the amount of traffic that the proposed development will add to each roadway segment in the area. According to GRTA requirements, a roadway segment carries a "significant" amount of traffic if the project contributes 7% or more trips to the two-way daily service volumes of the roadway at the appropriate level of service standard. Upon agreement with GRTA a level of service standard of "D" was used for determining the study area network.

The traffic generated by the proposed project was then assigned to the area roadways using the trip distribution to determine the site-generated traffic on each roadway segment. The boundaries of the study network extend to the most distant intersections where at least 7% of the service volumes on the segment are attributed to project traffic. The following study intersections fell within the 7% rule and/or have been selected as being suitable for evaluation in discussions with ARC, GRTA, GDOT and Rockdale County:

1. Sigman Road at Farmer Road
2. Sigman Road at Lester Road
3. Farmer Road at Lester Road

The location of the development and the surrounding study network is shown in Figure 1. Other intersections within this corridor, such as unsignalized side streets, right-in / right-out driveways or private driveways have not been included in the study network.



LOCATION MAP FIGURE 1

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EXISTING ROADWAY FACILITIES

The following is a brief description of each of the roadway facilities located in proximity to the site:

Sigman Road

Sigman Road is an east-west, four-lane, median divided roadway with a speed limit of 35 mph to the east of Farmer Road and 45 mph to the west of Farmer Road in the vicinity of the site. GDOT traffic counts (Station ID's 247-0267 & 247-0269) indicate that the daily traffic volume on Sigman Road in 2022 was 15,100 vehicles per day west of General Arts Road NW and 11,700 vehicles per day east of Lester Road respectively. GDOT classifies Sigman Road as an Urban Principal Arterial roadway.

Farmer Road

Farmer Road is a north-south, two-lane undivided roadway with a posted speed limit of 35 mph in the vicinity of the site.

Lester Road

Lester Road is a north-south, two-lane, undivided roadway with a posted speed limit of 40 mph to the north of Sigman Road and 35 mph to the south of Sigman Road in the vicinity of the site.

Existing Bicycle and Pedestrian Facilities

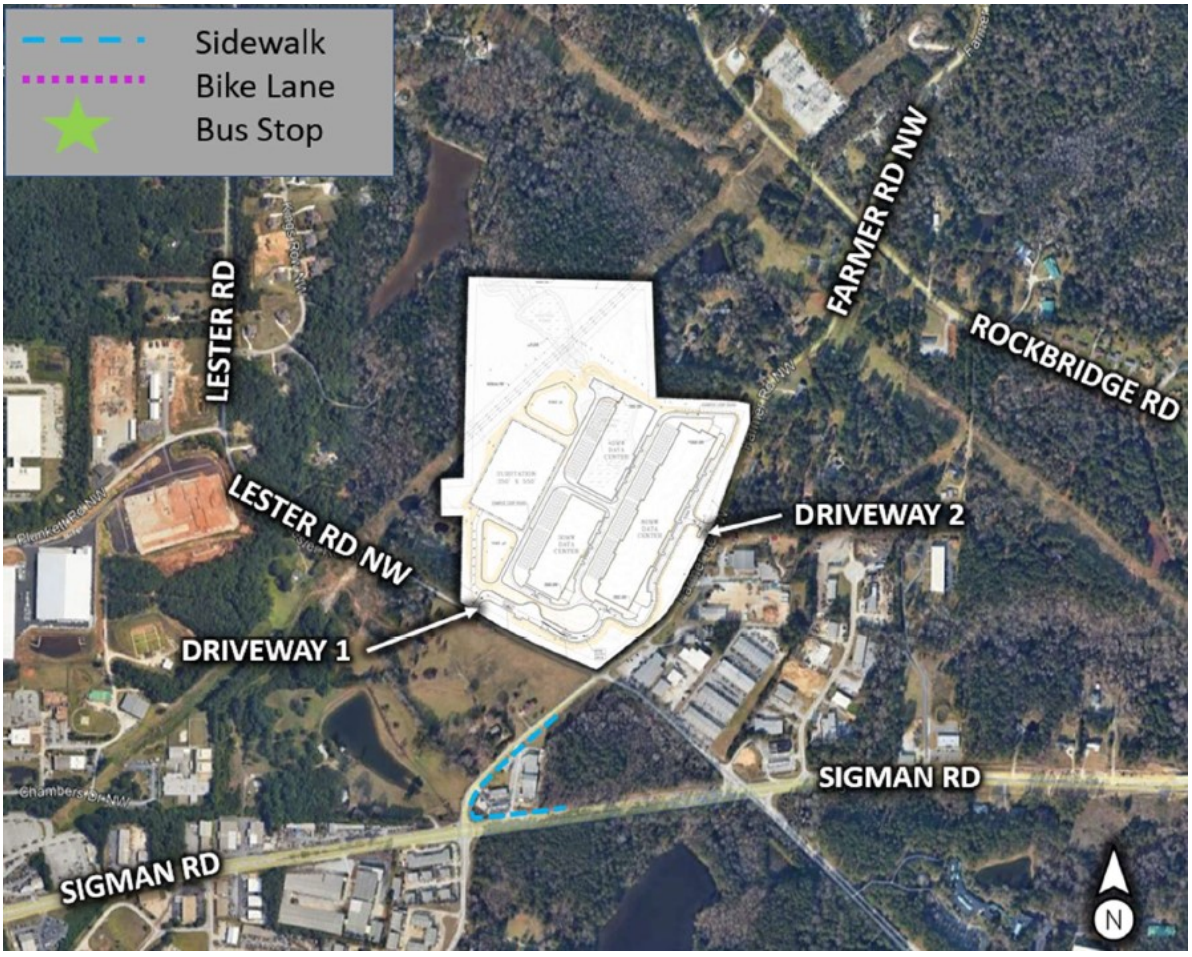
- Sigman Road and Farmer Road
    - Sidewalks are present on Farmer Road (north side) and Sigman Road (east side) from the intersection of Sigman Road at Farmer Road.
    - Crosswalks are present
- Farmer Road and Lester Road
    - Crosswalks are present
- Lester Road and Sigman Road
    - Crosswalks are present
- Bike lanes and bus stops were not identified in a ½ mile radius of the proposed development

Alternative Modes of Access

- Existing transit routes were not identified in the study network.
- No high-capacity transit stations were identified in the vicinity of the proposed development.

The graphic below includes the location of existing sidewalks in the study network.

Existing Alternative Transportation Map



STUDY METHODOLOGY

In this study, the methodology used for evaluating traffic operations at each of the subject intersections is based on the criteria set forth in the Transportation Research Board's Highway Capacity Manual, 6th edition (HCM 6). Synchro software, which utilizes the HCM methodology, was used for the analysis. The following is a description of the methodology employed for the analysis of unsignalized and signalized intersections.

Unsignalized Intersections

For unsignalized intersections controlled by a stop sign on minor streets, the level-of-service (LOS) for motor vehicles with controlled movements is determined by the computed control delay according to the thresholds stated in Table 1 below. LOS is determined for each minor street movement (or shared movement), as well as major street left turns. LOS is not defined for the intersection as a whole or for major street approaches. The LOS of any controlled movement which experiences a volume to capacity ratio greater than 1 is designed as "F" regardless of the control delay.

Control delay for unsignalized intersections includes initial deceleration delay, queue move-up time, stopped delay and final acceleration delay. Several factors affect the control delay for unsignalized intersections, such as the availability and distribution of gaps in the conflicting traffic stream, critical gaps and follow-up time for a vehicle in the queue.

Level-of-service is assigned a letter designation from "A" through "F". Level-of-service "A" indicates excellent operations with little delay to motorists, while level-of-service "F" exists when there are insufficient gaps of acceptable size to allow vehicles on the side street to cross the main road without experiencing long delays.

TABLE 1 – LEVEL-OF-SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS

Control Delay (sec/vehicle)	LOS by Volume-to-Capacity Ratio*	
	v/c ≤ 1.0	**v/c > 1.0**
≤ 10	A	F
> 10 and ≤ 15	B	F
> 15 and ≤ 25	C	F
> 25 and ≤ 35	D	F
> 35 and ≤ 50	E	F
> 50	F	F

*The LOS criteria apply to each lane on a given approach and to each approach on the minor street. LOS is not calculated for major-street approaches or for the intersection.

Source: Highway Capacity Manual, 6th edition, Exhibit 20-2 *LOS Criteria: Motorized Vehicle Mode*

Signalized Intersections

According to HCM procedures, LOS can be calculated for the entire intersection, each intersection approach, and each lane group. HCM uses control delay alone to characterize LOS for the entire intersection or an approach. Control delay per vehicle is composed of initial deceleration delay, queue move-up time, stopped delay and final acceleration delay. Both control delay and volume-to-capacity ratio are used to characterize LOS for a lane group. A volume-to-capacity ratio greater than 1.0 or more for a lane group indicates failure from capacity perspective. Therefore, such a lane group is assigned LOS F regardless of the amount of control delay.

Table 2 below summarizes the LOS criteria from HCM for motorized vehicles at signalized intersections.

TABLE 2 – LEVEL-OF-SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS

Control Delay (sec/vehicle) *	LOS for Lane Group by Volume-to-Capacity Ratio*	
	v/c ≤ 1.0	**v/c > 1.0**
≤ 10	A	F
> 10 and ≤ 20	B	F
> 20 and ≤ 35	C	F
> 35 and ≤ 55	D	F
> 55 and ≤ 80	E	F
> 80	F	F

*For approach-based and intersection wide assessments, LOS is defined solely by control delay

Source: Highway Capacity Manual, 6th edition, Exhibit 19-8 *LOS Criteria: Motorized Vehicle Mode*

LOS A is typically assigned when the volume-to-capacity (v/c) ratio is low and either progression is exceptionally favorable, or the cycle length is very short. LOS B is typically assigned when the v/c ratio is low and either progression is highly favorable, or the cycle length is short. However, more vehicles are stopped than with LOS A. LOS C is typically assigned when progression is favorable, or the cycle length is moderate. Individual cycle failures (one or more queued vehicles are not able to depart because of insufficient capacity during the cycle) may begin to appear at this level. Many vehicles still pass through the intersection without stopping, but the number of vehicles stopping is significant. LOS D is typically assigned when the v/c ratio is high and either progression is ineffective, or the cycle length is long. There are many vehicle-stops and individual cycle failures are noticeable. LOS E is typically assigned when the v/c ratio is high, progression is very poor, the cycle length is long, and individual cycle failures are frequent. LOS F is typically assigned when the v/c ratio is very high, progression is very poor, the cycle length is long, and most cycles fail to clear the queue.

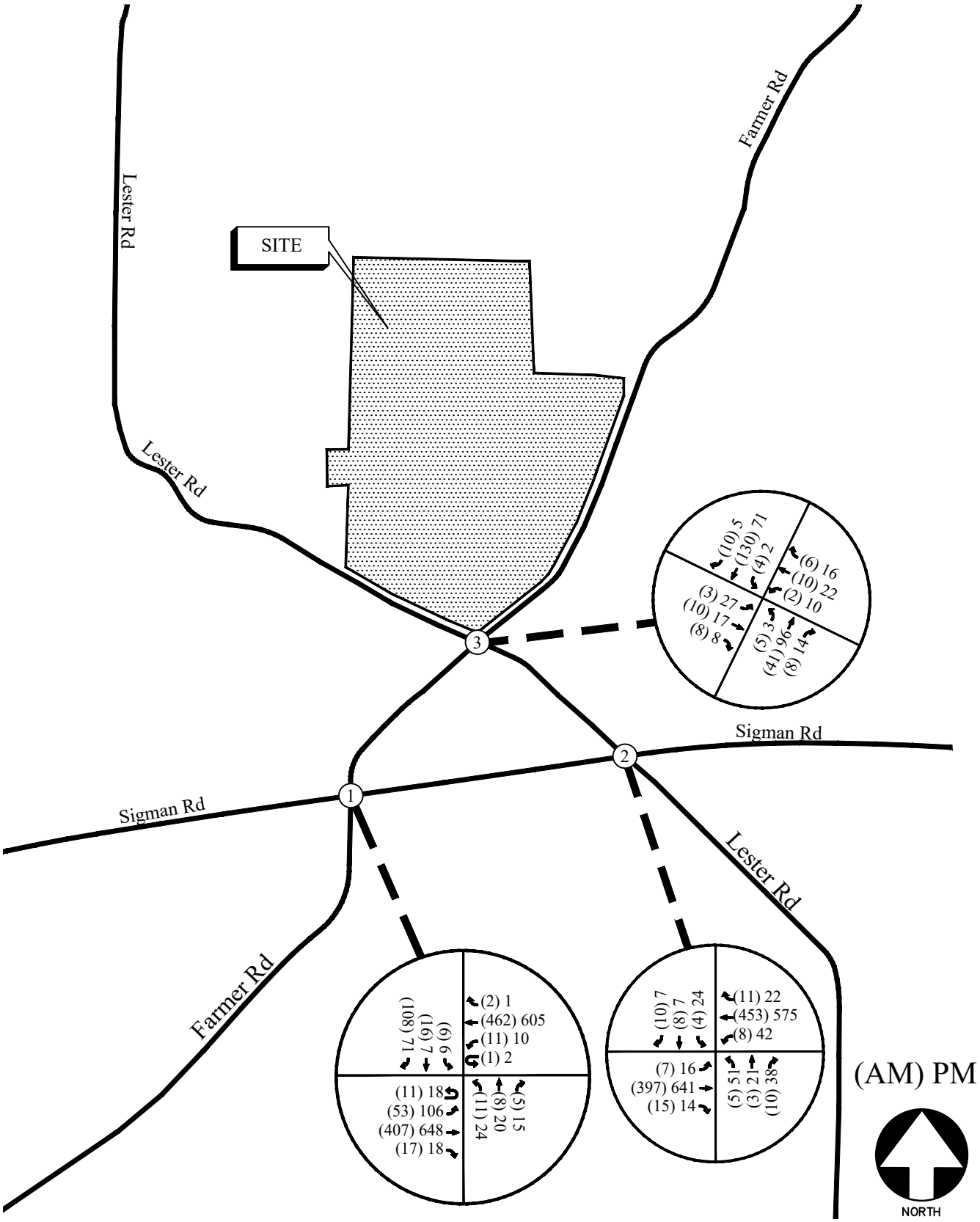
EXISTING 2024 TRAFFIC ANALYSIS

Existing Traffic Volumes

Existing traffic counts were obtained at the following study intersections:

1. Sigman Road at Farmer Road
2. Sigman Road at Lester Road
3. Farmer Road at Lester Road

Turning movement counts were collected on Tuesday, March 12, 2024. All turning movement counts were recorded during the AM and PM peak hours between 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM, respectively. The four consecutive 15-minute interval volumes that summed to produce the highest volume at the intersections were then determined. These volumes make up the peak hour traffic volumes for the intersections counted and are shown in Figure 2. The existing traffic control and lane geometry for the intersections are shown in Figure 3.



EXISTING WEEKDAY PEAK-HOUR VOLUMES FIGURE 2

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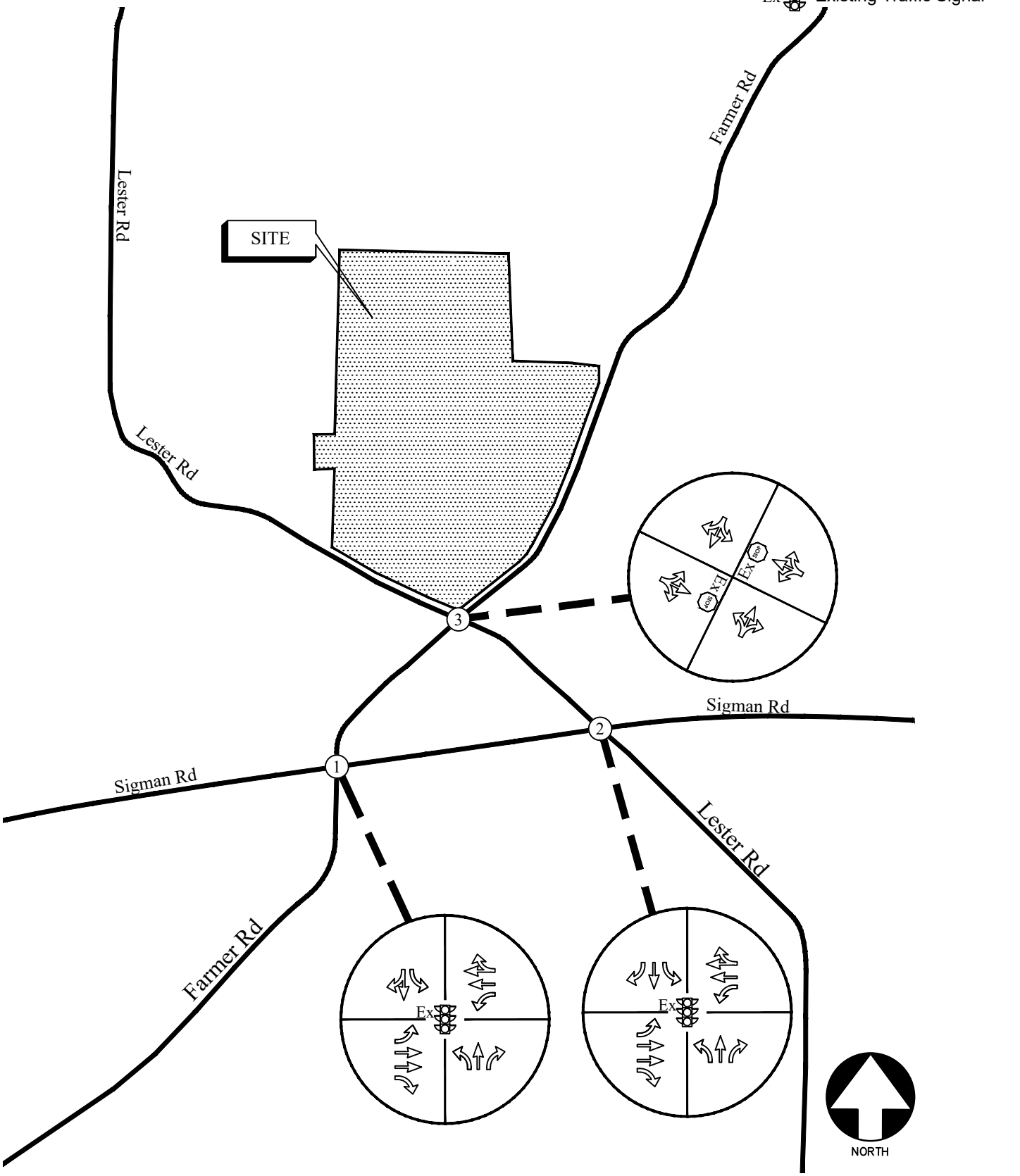

EXISTING TRAFFIC CONTROL AND LANE GEOMETRY FIGURE 3

A&R Engineering Inc.

Existing Traffic Operations

Existing 2024 traffic operations were analyzed at the study intersections in accordance with the HCM methodology. The results of the analyses are shown in Table 3.

TABLE 3 – EXISTING INTERSECTION OPERATIONS

	Intersection	Traffic Control	AM Peak	PM Peak	LOS Standard
1	**Sigman Rd @ Farmer Rd**	Signalized	**B (10.3)**	**A (8.5)**	**D/D**
	-Eastbound Approach		A (7.2)	A (7.2)	D/D
	-Westbound Approach		A (0.6)	A (0.8)	D/D
	-Northbound Approach		D (39.7)	D (41.7)	D/D
	-Southbound Approach		D (51.5)	D (53.8)	D/D
2	**Sigman Rd @ Lester Rd**	Signalized	**A (3.2)**	**A (6.6)**	**D/D**
	-Eastbound Approach		A (0.2)	A (0.4)	D/D
	-Westbound Approach		A (4.0)	A (7.0)	D/D
	-Northbound Approach		D (48.2)	D (44.2)	D/D
	-Southbound Approach		D (49.8)	D (44.4)	D/D
3	**Farmer Rd @ Lester Rd**	Stop Controlled on EB and WB Approaches			
	-Eastbound Approach		B (10.0)	B (10.5)	D/D
	-Westbound Approach		B (10.0)	B (10.2)	D/D
	-Northbound Left		A (7.7)	A (7.4)	D/D
	-Southbound Left		A (7.5)	A (7.5)	D/D

The results of existing traffic operations analysis indicate that the signalized intersections are operating at an overall levels-of-service “B” or better in the AM and PM peak hours. The stop-controlled approaches at un-signalized study intersections are operating at a levels-of-service “B” or better in the AM and PM peak hours.

PROJECT DESCRIPTION

The proposed DC Blox – ATL East Data Center DRI 4120 will be located at 1726 & 1830 Farmer Road NW, Conyers in Rockdale County. The development includes three industrial data center buildings with a combined 1,016,828 square feet.

The development proposes two full access driveways, one on Farmer Road and the other on Lester Road.

Site Plan

A site plan is shown in Figure 4. A digital copy of the site plan is also provided with this report.

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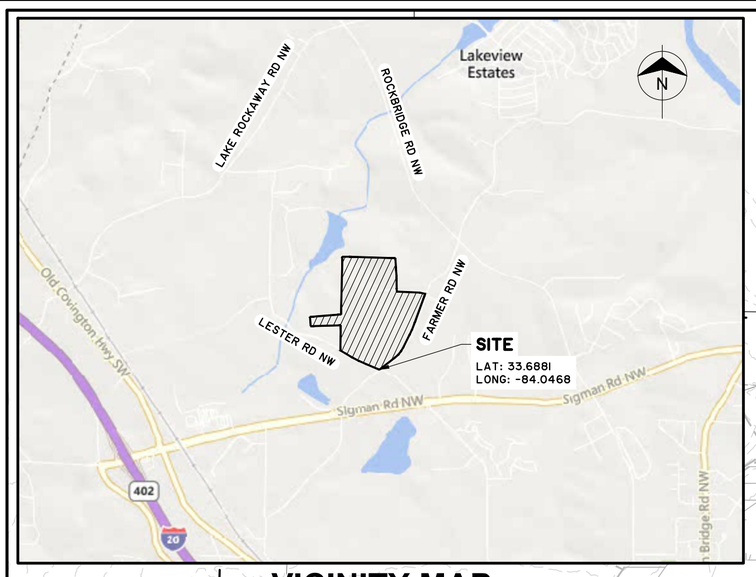
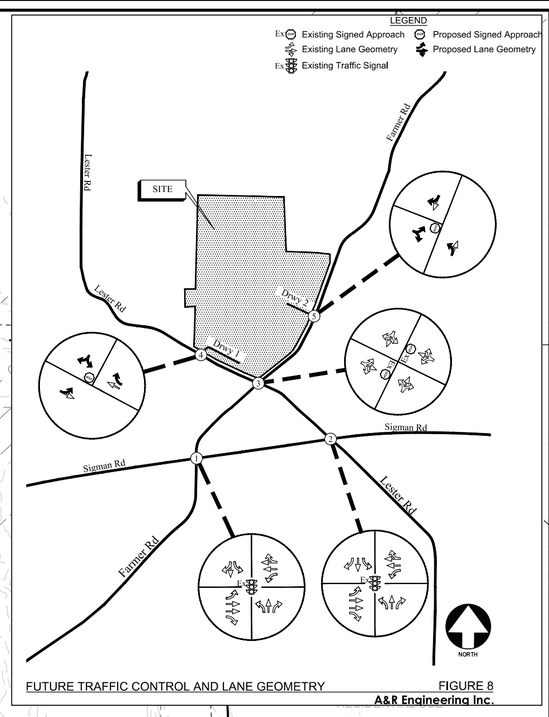


VICINITY MAP

1" = 2000'



FUTURE TRAFFIC CONTROL AND LANE GEOMETRY — FIGURE 8

A&R Engineering Inc.

ATL EAST

A DATA CENTER CAMPUS BY DC BLOX

DRI NUMBER: **4120**

CLIENT:
DC BLOX
1040 CROWN POINTE PARKWAY
SUITE 560
ATLANTA, GA 30338

CIVIL ENGINEER:
THOMAS & HUTTON
1501 MAIN STREET
SUITE 400
COLUMBIA, SC 29201

TRAFFIC CONSULTANT:
A&R ENGINEERING, INC.
2160 KINGSTON COURT
SUITE O
MARIETTA, GA 30067

SITE INFORMATION:

PARCEL NUMBER:	021001004, 021001004A
	LAND LOT 235 & 246
	16TH DISTRICT
SITE LOCATION:	1726 & 1830 FARMER RD NW
	ROCKDALE COUNTY, GA
SITE ACREAGE:	68.41 ACRES
DEVELOPABLE ACREAGE:	59.66 ACRES
OPEN SPACE:	24.58 AC (41%)
ZONING:	O-I OFFICE INSTITUTIONAL
PROPOSED USE:	DATA CENTER
FLOOR AREA RATIO:	0.34
PROPOSED PARKING:	206 SPACES (7 ADA)
REQUIRED PARKING:	501 SPACES (1 PER 2000 SF)

VARIANCE REQUESTED FROM ROCKDALE COUNTY FOR REDUCTION IN MINIMUM PARKING TO 167 SPACES (1 PER 6000 SF).

BUILDING INFORMATION

30MW DATA CENTER

BUILDING AREA:	254,977 SF
NO. OF STORIES:	2-STORY
BUILDING HEIGHT:	75 FT

80MW DATA CENTER

BUILDING AREA:	498,315 SF
NO. OF STORIES:	2-STORY
BUILDING HEIGHT:	75 FT

40MW DATA CENTER

BUILDING AREA:	263,536 SF
NO. OF STORIES:	2-STORY
BUILDING HEIGHT:	75 FT

APPRX. 16.0 AC OPEN SPACE
50' LANDSCAPE BUFFER
PROPERTY LINE
PARCEL NO. 0210010008
WALTER DAVIS ET AL
RESIDENTIAL USE
EXISTING POND
25' STATE POND BUFFER
PARCEL NO. 0210010106
ROYAL LAKE ESTATES
RESIDENTIAL USE
EXISTING GA. POWER TRANSMISSION LINES
POND #1
PRIMARY ADMIN LOADING DOCKS
CAMPUS LOOP ROAD 2 LANES
PARCEL NO. 021001006E
LINDA AIKENS YOUNG
RESIDENTIAL USE
PARCEL NO. 021001006D
LANIER HARPER
RESIDENTIAL USE
PARCEL NO. 0210010005
MARIA E PEREZ PATINO
RESIDENTIAL USE
RESIDENTIAL ACCESS POINT
SECONDARY ADMIN LOADING DOCKS
40MW DATA CENTER
140 SPACES
APPRX. 16 AC OPEN SPACE
SUBSTATION 350' X 550'
CAMPUS LOOP ROAD TWO LANES
GRAVEL SUBSTATION ACCESS ROAD TWO LANES
30MW DATA CENTER
80MW DATA CENTER
93 SPACES
50' LANDSCAPE BUFFER
SECONDARY, UNMANNED, SECURE ACCESS. ONE INCOMING & ONE OUTGOING 14FT CLEAR LANES.
SECONDARY ACCESS DRIVE
DRIVEWAY #2
25' SETBACK LINE
FARMER ROAD NW (40' R/W)
ACCESS POINT
PARCEL NO. 0210010027
ROBERT BAKER JR
RESIDENTIAL USE
POND #2
MAIN ENTRY DRIVE
PRIMARY ADMIN LOADING DOCKS
18 SPACES
PRIMARY ADMIN LOADING DOCKS
18 SPACES
APPRX. 7.0 AC OPEN SPACE
FARMER ROAD NW IS A TWO-LANE ROADWAY WITH GRASSED SHOULDERS. NO TURN LANES
ACCESS POINT
DRIVEWAY #1
LESTER ROAD NW IS A TWO-LANE ROADWAY WITH GRASSED SHOULDERS NO TURN LANES
DECELERATION LANE
MAIN ENTRY SECURITY. ONE INCOMING 14FT CLEAR LANE, ONE INCOMING 12FT CLEAR LANE, ONE OUTGOING 14FT CLEAR LANE.
LESTER ROAD NW (50' R/W)
MAIN ENTRY SECURITY GATES. ONE INCOMING 14FT CLEAR LANE, ONE INCOMING 12FT CLEAR LANE, ONE OUTGOING 14FT CLEAR LANE, ONE OUTGOING 12FT CLEAR LANE.
MAIN ENTRY DRIVE
PROPERTY LINE
ACCESS POINT
NOTE: ROADWAY IMPROVEMENTS WILL BE DETERMINED AFTER THE DRI ANALYSIS STUDY IS COMPLETE.
N
W
E
S

SITE LAYOUT EXHIBIT

ATL EAST

ROCKDALE COUNTY, GA

PREPARED FOR:
DC BLOX

PREPARED BY:

THOMAS & HUTTON
1020 Euclid Avenue
Charlotte, NC 28203 980.201.5505
www.thomasandhutton.com

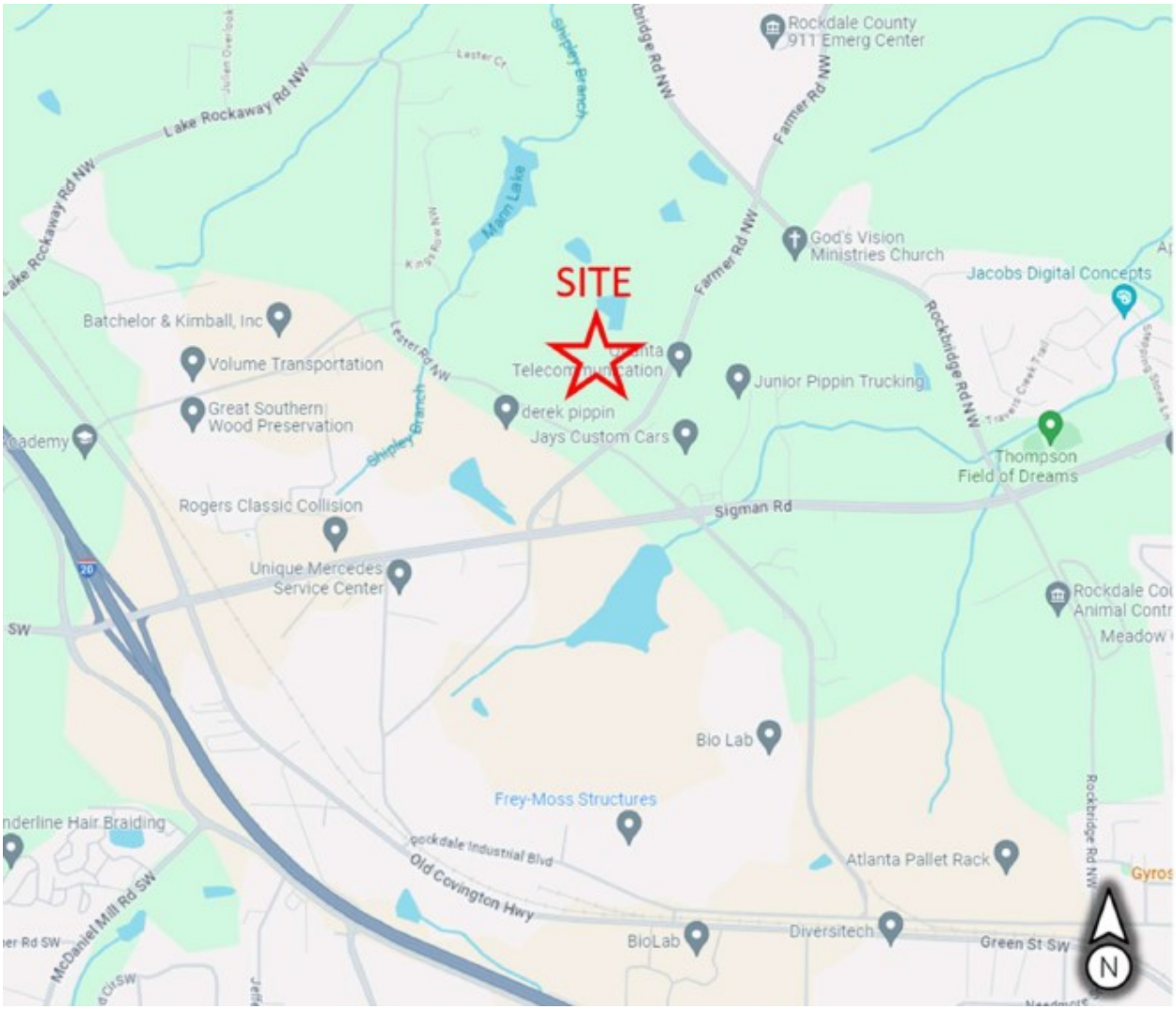
JOB NO:	J-31281.0001
DRAWN:	JKS
REVIEWED:	MBS
DATE:	03/05/24
SCALE:	1" = 80'
SHEET:	1 OF 1

Planned Bicycle and Pedestrian Facilities

Pedestrian sidewalks and trails will be provided throughout the development.

Potential Pedestrian and Bicycle Destinations

Potential pedestrian and bicycle destinations in the vicinity of the proposed development include the following:



- Restaurants/Food:
  - Mammy's Kitchen (within 1.8-mile proximity)
- Retail:
  - Dollar General Store on Sigman Road (within 1.6-mile proximity)
- Gas Stations:
  - BP petrol pump on Sigman Road (within 0.7-mile proximity)
  - Exxon petrol pump on Sigman Road (within 0.9-mile proximity)
  - Shell petrol pump on Rockbridge Road (within 1.4-mile proximity)

- Schools:
  - Wilson Academy (High School) on Old Covington Highway (within 1.5-mile proximity)
- Religious Institutions:
  - Kingdom Hall of Jehovah's Witnesses Church on Lake Rockaway Road (within 1.5-mile proximity)
- County Facilities:
  - Rockdale County Fire Department on Rockbridge Road (within 1.04-mile proximity)
  - Rockdale Country Fire & Rescue Training Annex on Iris Drive (Within 1.30-mile proximity)

Planned Transit Facilities

There is no existing or planned public transit service near the proposed development.

Consistency with Adopted Comprehensive Plan

The proposed development will include three industrial data center buildings with a combined 1,016,828 square feet. The property includes 68.41 acres of land. The site is currently zoned as OI (Office-Institutional District) per Rockdale County standards.

Future Land Use Map

Future Land Use Map Zoning	Office Institutional (OI)
Rockdale County Vision and Goals:	The county is working on revising their vision and goals for this land use and this information is not yet publicly available.
Character Area Vision and Goals:	The character area for the proposed site is Office Institutional (OI).
Land Use Vision and Goals:	The county is working on revising their vision and goals for this land use and this information is not yet publicly available.
Relation to Existing Land Use Plans	The proposed land use aligns with the future land us and character area.

The proposed development is consistent with the land use vision and goals listed above.

Project Phasing

This project has been evaluated for the complete build-out of the development in 2026 (one phase).

Trip Generation

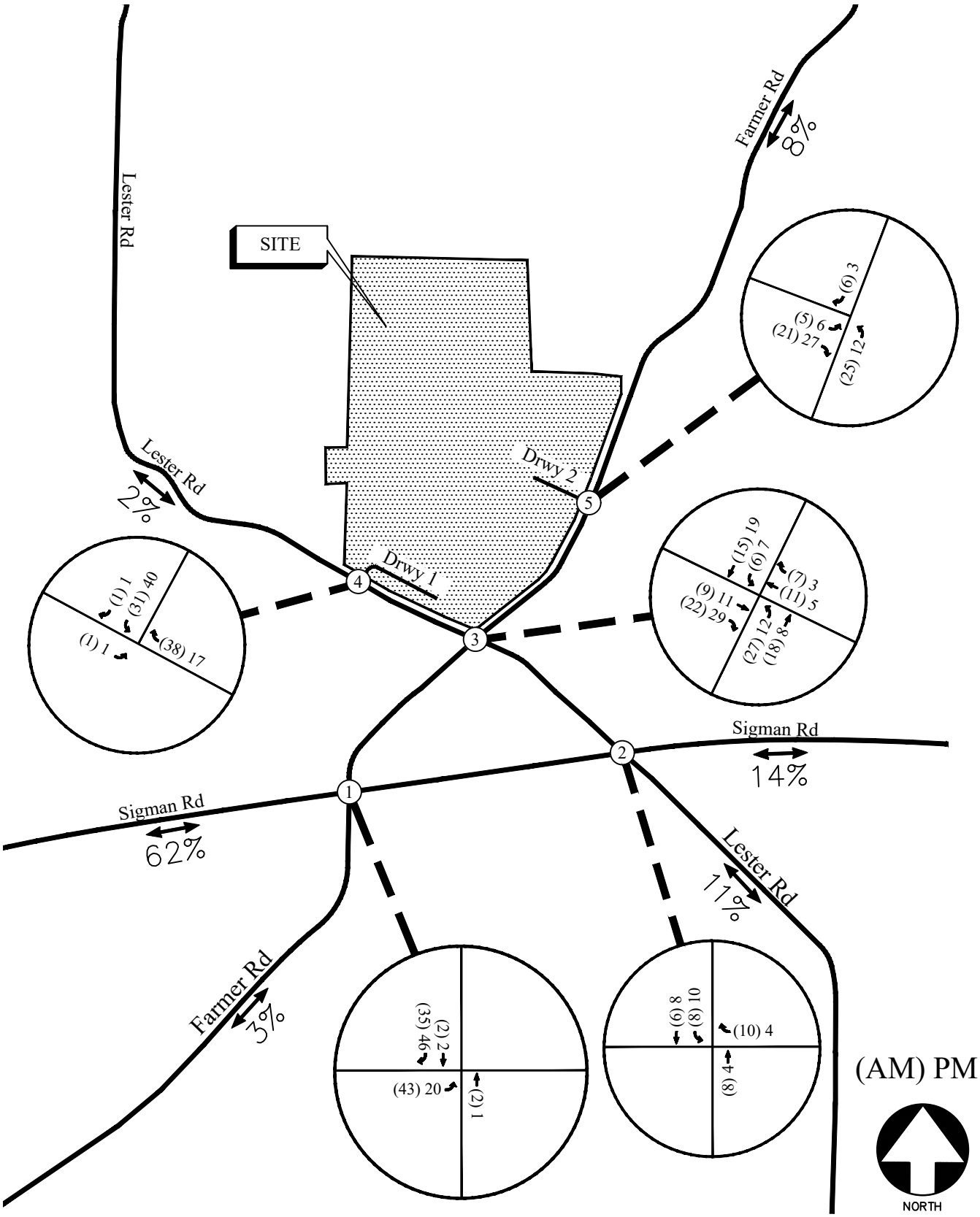
Trip generation estimates for the project were based on the rates and equations published in the 11th edition of the Institute of Transportation Engineers (ITE) Trip Generation report. This reference contains traffic volume count data collected at similar facilities nationwide. The trip generation was based on the following ITE Land Use: *160 – Data Center.* The trip generation for the proposed development is shown in Table 4.

TABLE 4 – TRIP GENERATION

Land Use	Size	AM Peak Hour			PM Peak Hour			24-Hour
		Enter	Exit	Total	Enter	Exit	Total	2-way
ITE 160 – Data Center	1,016,828 sf	70	57	127	32	74	106	1,007

Trip Distribution

The trip distribution describes how traffic arrives and departs from the site. An overall trip distribution was developed for the site based on a review of GDOT ADT volumes and the locations of major roadways and highways that will serve the development. The site-generated peak hour traffic volumes, shown in Table 4, were assigned to the study area intersections based on this distribution. The outer-leg distribution and AM and PM peak hour new traffic generated by the site are shown in Figure 5.



TRIP DISTRIBUTION AND NEW SITE-GENERATED WEEKDAY PEAK HOUR VOLUMES

FIGURE 5

A&R Engineering Inc.

FUTURE 2026 TRAFFIC ANALYSIS

The future 2026 traffic operations are analyzed for the "Build" and "No-Build" conditions. This provides a basis of reference for determining both the contribution of the site to overall traffic conditions and the additional improvements needed to provide sufficient site access and capacity for passing traffic. Note that survey and construction drawings would be needed to verify the feasibility and extent of additional right-of-way required for any recommended improvements.

Improvements that are identified as "System Improvements" address deficiencies that are found within the existing road network prior to any impacts from the proposed development's added traffic. Improvements that are identified as "Site Mitigation Improvements" address further impacts that are a result of the proposed development's added traffic.

Future "No-Build" Conditions

The "No-Build" (or background) conditions provide an assessment of how traffic will operate in the study horizon year without the study site being developed as proposed, with projected increases in through traffic volumes due to normal annual growth and due to other planned developments in the area. The Future "No-Build" volumes consist of the existing traffic volumes (Figure 2) plus increases for annual growth of traffic and traffic from other planned developments.

Annual Traffic Growth

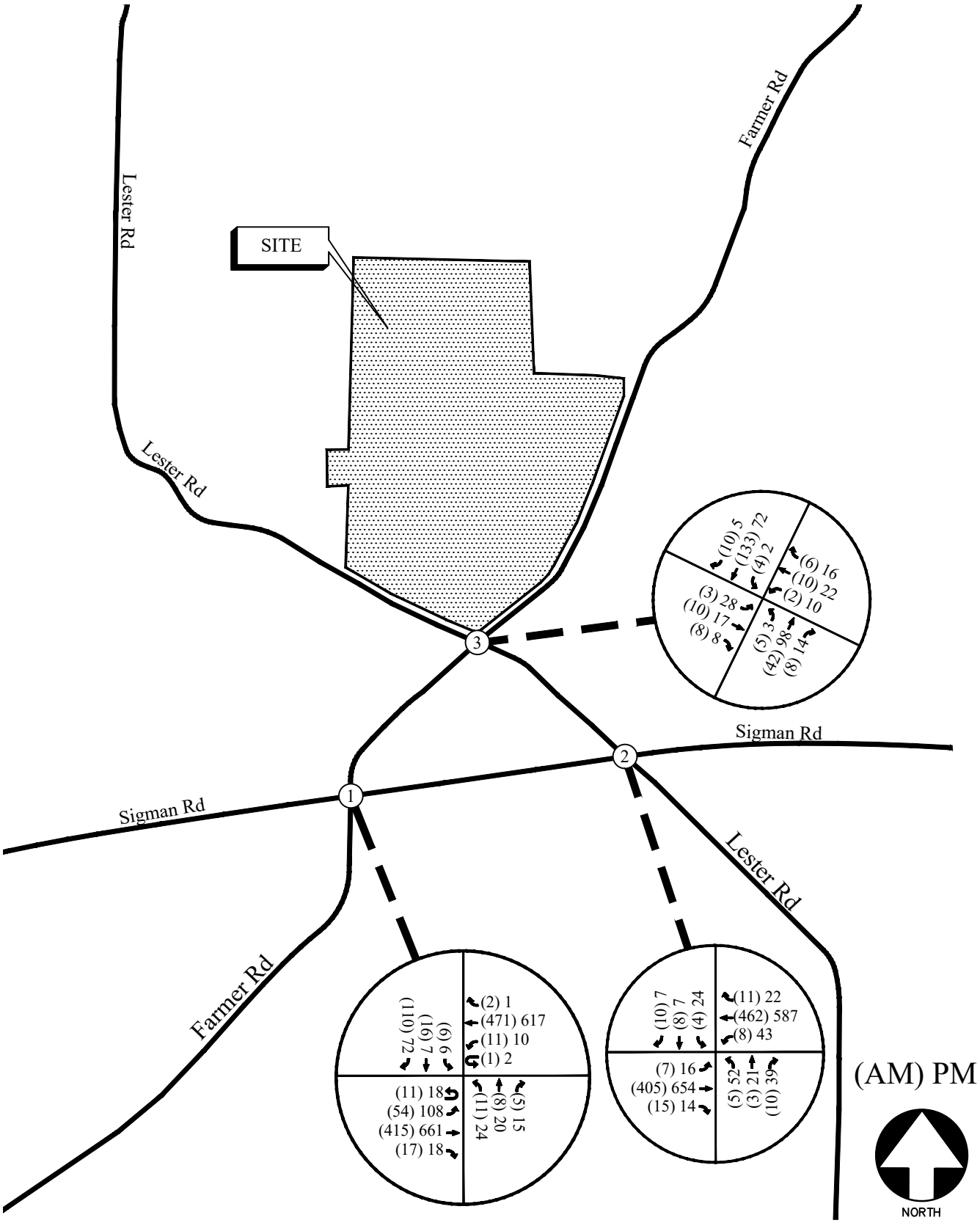
In order to evaluate future traffic operations in this area, a projection of normal traffic growth was applied to the existing volumes. The Georgia Department of Transportation recorded average daily traffic volumes at several locations in the vicinity of the site. Reviewing the growth over the last three (2017-2019) years revealed growth of approximately 1.0% in the area. This growth factor was applied to the existing traffic volumes and traffic from the adjacent developments is added to estimate the future year traffic volumes prior to the addition of site-generated traffic. The resulting Future "No-Build" volumes on the roadway are shown in Figure 6.

Planned and Programmed Improvements in Study Area

No programmed projects were identified in the study network.

Transportation Project Interaction with DRI

N/A



FUTURE (NO-BUILD) WEEKDAY PEAK HOUR VOLUMES FIGURE 6

A&R Engineering Inc.

Future "No-Build" Traffic Operations

The future "No-Build" traffic operations were analyzed using the volumes in Figure 6 and the results are shown in Table 5.

TABLE 5 – FUTURE "NO-BUILD" INTERSECTION OPERATIONS

Intersection		Intersection			
		NO IMPROVEMENTS		SYSTEM IMPROVEMENTS	
		AM Peak	PM Peak	AM Peak	PM Peak
1	**Sigman Rd @ Farmer Rd**	**B (10.3)**	**A (8.5)**		
	-Eastbound Approach	A (7.3)	A (7.3)		
	-Westbound Approach	A (0.7)	A (0.8)	-	-
	-Northbound Approach	D (39.6)	D (41.6)		
	-Southbound Approach	D (51.4)	D (53.7)		
2	**Sigman Rd @ Lester Rd**	**A (3.2)**	**A (6.6)**		
	-Eastbound Approach	A (0.2)	A (0.4)		
	-Westbound Approach	A (4.1)	A (7.1)	-	-
	-Northbound Approach	D (48.2)	D (44.1)		
	-Southbound Approach	D (49.8)	D (44.4)		
3	**Farmer Rd @ Lester Rd**				
	-Eastbound Approach	B (10.0)	B (10.5)		
	-Westbound Approach	B (10.1)	B (10.2)	-	-
	-Northbound Left	A (7.7)	A (7.4)		
	-Southbound Left	A (7.6)	A (7.5)		

* Delay exceeds 300 seconds

The results of future "No-Build" conditions traffic analysis indicate that the signalized intersections are operating at an overall levels-of-service "B" or better in the AM and PM peak hours. The stop-controlled approaches at un-signalized study intersections are operating at a levels-of-service "B" or better in the AM and PM peak hours.

Recommended System Improvements

Since the intersections are operating at the satisfactory level of service, no system improvements were identified from the "No-Build" condition analysis.

Auxiliary Lane Analysis

Included below are analyses for left-turn lanes and deceleration lanes for all site driveways per GDOT standards. The analyses below are based off the trip distribution included in the section "Trip Distribution". According to the trip distribution, the total 24-hour two-way volume entering and exiting the site is 1,007 vehicles. The AADT on Farmer Road and Lester Road are assumed to be less than 6,000 vehicles based on the GDOT volumes on the surrounding roadways.

Left Turn Lane Analysis

For two lane roadways with AADT's less than 6,000 vehicles and a posted speed limit of 35 mph, the daily site generated traffic left-turn movements threshold to warrant a left-turn lane is 300 left-turning vehicles a day, respectively. For two lane roadways with AADT's less than 6,000 vehicles and a posted speed limit of 40 mph, the daily site generated traffic left-turn movements threshold to warrant a left-turn lane is 250 left-turning vehicles a day. The projected left-turn volumes per day for each driveway is included in Table 6.

TABLE 6– GDOT REQUIREMENTS FOR LEFT TURN LANES

Intersection	Left turn traffic (% total entering)	Left-turn Volume (vehicles/day)	Roadway Speed/ # lanes / ADT	GDOT Threshold (vehicles/day)	Warrants met?
Lester Rd @ Site Drwy 1	2.00%	**10** (Total trips) ÷ 2 × 0.02 = (1007) ÷ 2 x 0.02 = 10	40 mph / 2-Lane / < 6,000	250	No
Farmer Rd @ Site Drwy 2	50%	**254** (Total trips) ÷ 2 × 0.504 = (1007) ÷ 2 x 0.504 = 254	35 mph / 2-Lane / < 6,000	300	No

A left turn lane is not warranted at any of the site driveways per GDOT standards.

Deceleration Turn Lane Analysis

The daily site generated traffic right-turn movements threshold to warrant a deceleration lane is 150 right turning vehicles a day for two lane roadways with AADT's less than 6,000 vehicles and a posted speed limit of 40 mph. The daily site generated traffic right-turn movements threshold to warrant a deceleration lane is 200 right turning vehicles a day for two lane roadways with AADT's less than 6,000 vehicles and a posted speed limit of 35 mph. The projected right-turn volumes per day for each driveway is included in Table 7.

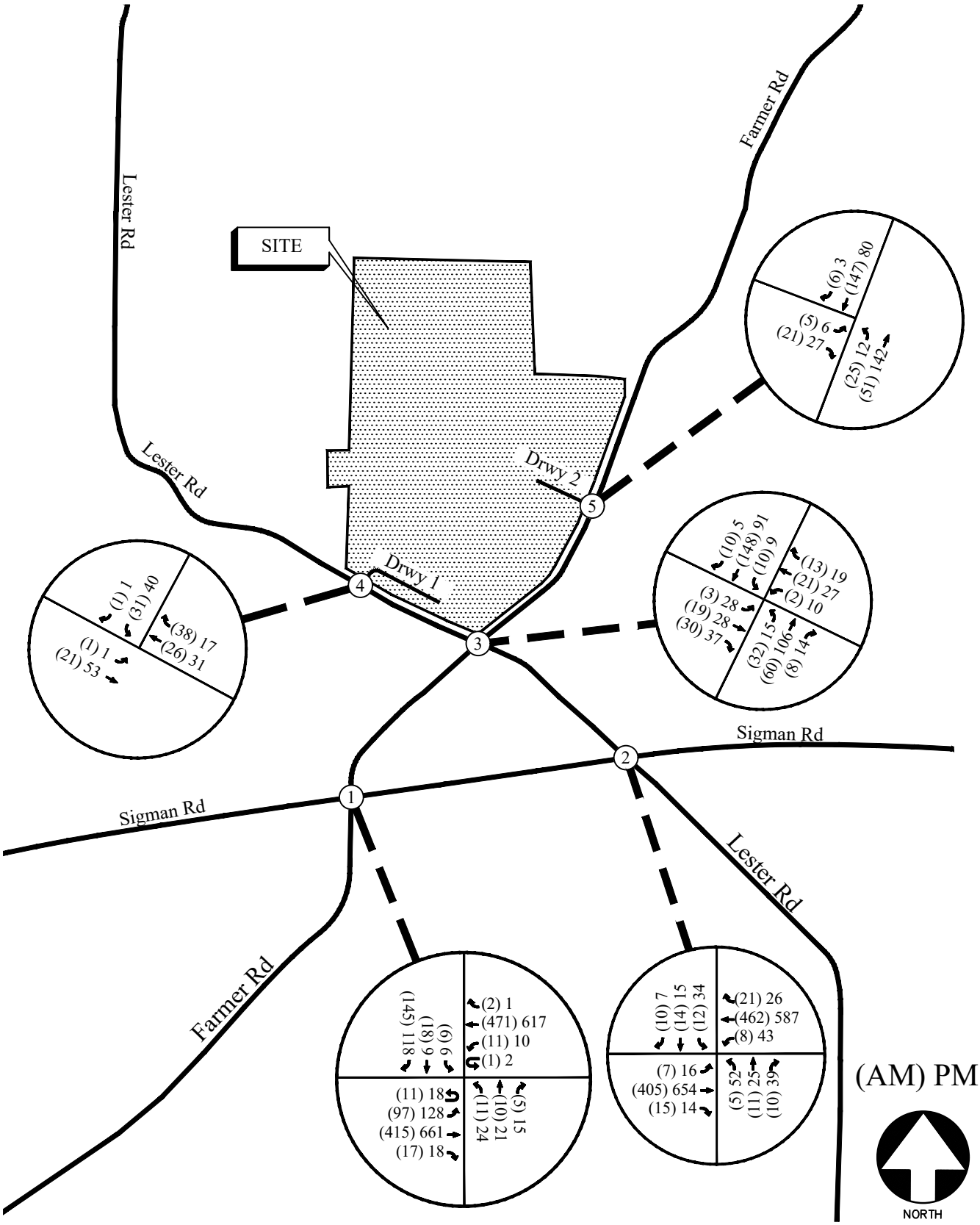
TABLE 7 – GDOT REQUIREMENTS FOR DECELERATION LANES

Intersection	Right-turn traffic (% total entering)	Right-turn Volume (vehicles/day)	Roadway Speed/ # lanes / ADT	GDOT Threshold (vehicles/day)	Warrants met?
Lester Rd @ Site Drwy 1	40%	**199** (Total trips) ÷ 2 × 0.396 = (1007) ÷ 2 x 0.396 = 199	40 mph / 2-Lane / < 6,000	150	Yes
Farmer Rd @ Site Drwy 2	8%	**40** (Total trips) ÷ 2 × 0.08 = (1007) ÷ 2 x 0.08 = 40	35 mph / 2-Lane / < 6,000	200	No

A deceleration lane is warranted at the site driveway 1 on Lester Road per GDOT standards.

Future "Build" Conditions

The "Build" development conditions include the estimated background traffic from the "No-Build" conditions plus the added traffic from the proposed development and adjacent site developments. In order to evaluate future traffic operations in this area, the additional traffic volumes from the proposed site (Figure 5) were added to base traffic volumes (Figure 6) to calculate the future traffic volumes after the construction of the development. These total future "Build" traffic volumes are shown in Figure 7.



FUTURE (BUILD) WEEKDAY PEAK HOUR VOLUMES FIGURE 7

A&R Engineering Inc.

Future "Build" Traffic Operations

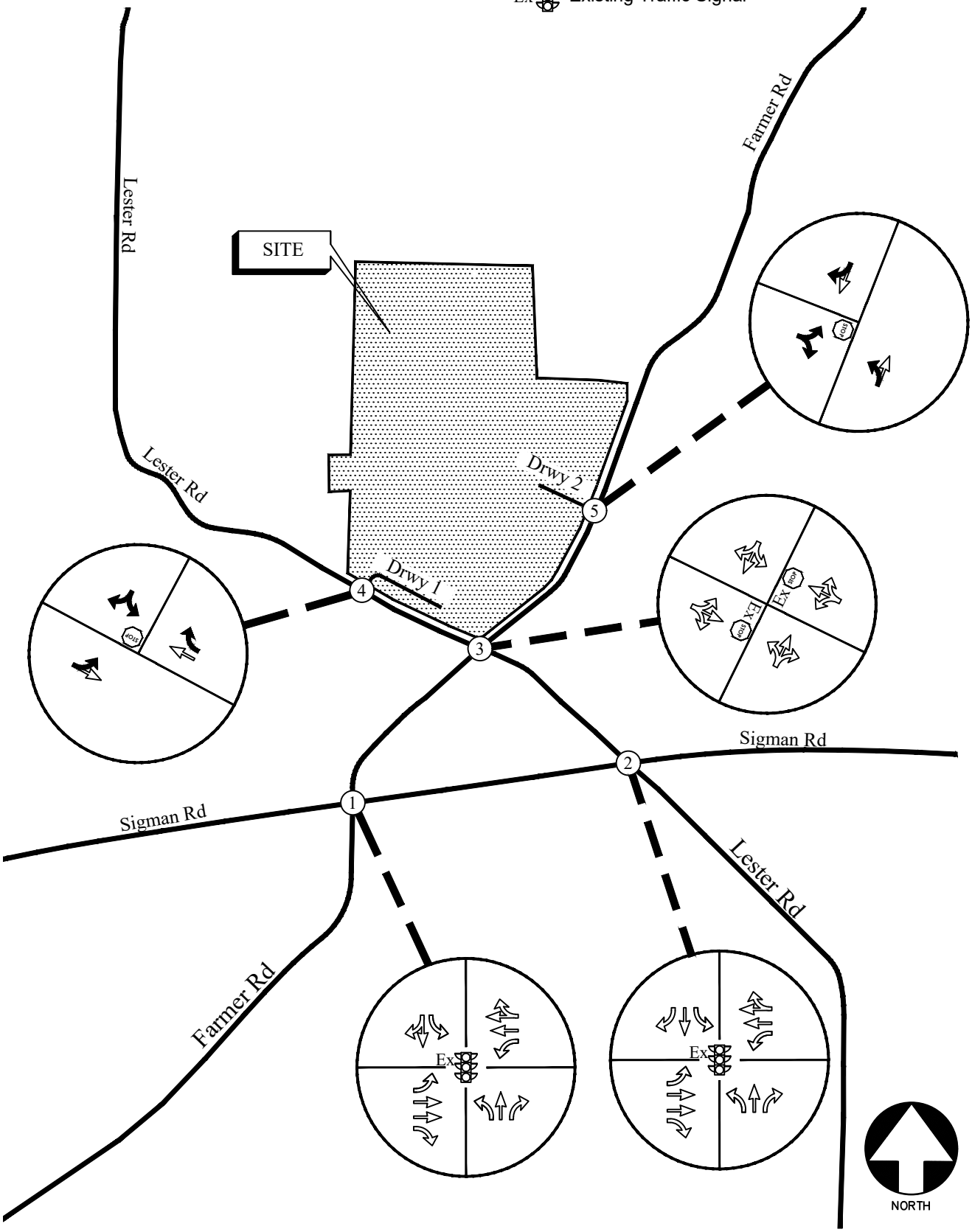
The future "Build" traffic operations were analyzed using the volumes in Figure 7. The results of the future "Build" traffic operations analysis are shown in Table 8. Recommendations for future traffic control and lane geometry are shown in Figure 8.

TABLE 8 – FUTURE "BUILD" INTERSECTION OPERATIONS

	Intersection	Build Condition: LOS (Delay)					
		NO IMPROVEMENTS		SYSTEM IMPROVEMENTS ONLY		SITE IMPROVEMENTS	
		AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
1	**Sigman Rd @ Farmer Rd**	**B (12.0)**	**B (10.4)**				
	-Eastbound Approach	A (8.3)	A (9.0)				
	-Westbound Approach	A (0.7)	A (0.9)	-	-	-	-
	-Northbound Approach	D (37.4)	D (38.2)				
	-Southbound Approach	D (52.1)	D (51.6)				
2	**Sigman Rd @ Lester Rd**	**A (4.5)**	**A (7.3)**				
	-Eastbound Approach	A (0.2)	A (0.5)				
	-Westbound Approach	A (4.8)	A (7.3)	-	-	-	-
	-Northbound Approach	D (47.7)	D (43.8)				
	-Southbound Approach	D (46.7)	D (44.0)				
3	**Farmer Rd @ Lester Rd**						
	-Eastbound Approach	B (10.5)	B (11.1)				
	-Westbound Approach	B (11.0)	B (10.9)	-	-	-	-
	-Northbound Left	A (7.8)	A (7.5)				
	-Southbound Left	A (7.6)	A (7.5)				
4	**Lester Rd @ Site Drwy 1**						
	-Eastbound Left	A (7.4)	A (7.3)	-	-	-	-
	-Southbound Approach	A (8.9)	A (9.2)				
5	**Farmer Rd @ Site Drwy 2**						
	-Eastbound Approach	A (9.4)	A (9.1)	-	-	-	-
	-Northbound Left	A (7.6)	A (7.4)				

* Delay exceeds 300 seconds

The results of future "Build" conditions traffic analysis indicate that the signalized intersections are operating at an overall levels-of-service "B" or better in the AM and PM peak hours. The stop-controlled approaches at un-signalized study intersections are operating at a levels-of-service "B" or better in the AM and PM peak hours.



FUTURE TRAFFIC CONTROL AND LANE GEOMETRY FIGURE 8

A&R Engineering Inc.

CONCLUSIONS AND RECOMMENDATIONS

Traffic impacts were evaluated for the proposed DC Blox – ATL East Data Center (DRI #4120) that will be located at 1726 & 1830 Farmer Road NW, Conyers in Rockdale County, Georgia. The development includes three industrial data center buildings with a combined 1,016,828 square feet. The development proposes two full access driveways, one on Lester Road and other on Farmer Road.

The AM and PM peak hours have been analyzed in this study. In addition to the site access points, this study includes the evaluation of traffic operations at the intersections of:

1. Sigman Road at Farmer Road
2. Sigman Road at Lester Road
3. Farmer Road at Lester Road
4. Lester Road at Site Driveway 1
5. Farmer Road at Site Driveway 2

The analysis included the evaluation of future operations for "No-Build" and "Build" conditions, both of which account for increases in annual growth of through traffic. The results of future "No Build" and "Build" conditions traffic analysis indicate that the signalized intersections are operating at an overall levels-of-service "B" or better in the AM and PM peak hours. The stop-controlled approaches at un-signalized study intersections are operating at a levels-of-service "B" or better in the AM and PM peak hours. Based on the analysis, the proposed development will have minimal impact on traffic operations in the study network.

Recommended System Improvements

Since the intersections are operating at the satisfactory level of service, no system improvements were identified from the "No-Build" condition analysis.

Recommendation for Site Access Configuration

The following access configuration is recommended for the proposed site driveway intersections.

Intersection 4: Lester Rd at Site Driveway 1

- One entering and one exiting lane
- Stop-sign controlled on the driveway approach with Lester Road remaining free flow.
- Deceleration Lane for entering traffic
- Provide / Confirm adequate sight distance per AASHTO standards

Intersection 5: Farmer Rd at Site Driveway 2

- One entering and one exiting lane
- Stop-sign controlled on the driveway approach with Farmer Road remaining free flow.
- Provide / Confirm adequate sight distance per AASHTO standards

Appendix

Existing Intersection Traffic Counts .....
GRTA Letter of Understanding.....
Linear Regression of Daily Traffic.....
Fact Sheets for Planned and Programmed Improvements.....
Existing Intersection Analysis.....
Future “No-Build” Intersection Analysis.....
Future “Build” Intersections Analysis .....
Traffic Volume Worksheets .....

Existing Intersection Traffic Counts

A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
Farmer Road @ Lester Road
7-9 am | 4-6 pm

File Name : 20240095
Site Code : 20240095
Start Date : 03-12-2024
Page No : 1

Groups Printed- Cars & Buses - Trucks

	Farmer Road Northbound				Farmer Road Southbound				Lester Road Eastbound				Lester Road Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	11	2	13	0	25	2	27	3	0	1	4	0	4	0	4	48
07:15 AM	0	10	3	13	1	23	4	28	2	2	1	5	0	2	3	5	51
07:30 AM	1	11	2	14	1	37	3	41	0	4	2	6	0	3	1	4	65
07:45 AM	1	7	1	9	1	41	0	42	0	2	2	4	2	3	1	6	61
Total	2	39	8	49	3	126	9	138	5	8	6	19	2	12	5	19	225
08:00 AM	3	13	2	18	1	29	3	33	1	2	3	6	0	2	1	3	60
08:15 AM	3	11	1	15	0	24	2	26	1	1	1	3	1	0	3	4	48
08:30 AM	2	10	3	15	1	20	2	23	1	4	0	5	0	1	2	3	46
08:45 AM	0	10	1	11	3	10	4	17	3	2	0	5	1	1	4	6	39
Total	8	44	7	59	5	83	11	99	6	9	4	19	2	4	10	16	193
*** BREAK ***																	
04:00 PM	1	26	0	27	3	17	2	22	1	5	2	8	0	2	8	10	67
04:15 PM	1	21	0	22	6	16	3	25	6	2	2	10	4	0	9	13	70
04:30 PM	0	32	0	32	1	11	2	14	7	2	1	10	1	1	0	2	58
04:45 PM	2	21	4	27	0	22	2	24	12	2	2	16	2	5	7	14	81
Total	4	100	4	108	10	66	9	85	26	11	7	44	7	8	24	39	276
05:00 PM	0	17	3	20	1	21	0	22	6	6	1	13	2	4	3	9	64
05:15 PM	0	31	4	35	1	17	3	21	6	4	2	12	6	7	2	15	83
05:30 PM	1	27	3	31	0	11	0	11	3	5	3	11	0	6	4	10	63
05:45 PM	0	33	1	34	1	21	2	24	2	1	0	3	3	1	5	9	70
Total	1	108	11	120	3	70	5	78	17	16	6	39	11	18	14	43	280
Grand Total	15	291	30	336	21	345	34	400	54	44	23	121	22	42	53	117	974
Apprch %	4.5	86.6	8.9		5.2	86.2	8.5		44.6	36.4	19		18.8	35.9	45.3		
Total %	1.5	29.9	3.1	34.5	2.2	35.4	3.5	41.1	5.5	4.5	2.4	12.4	2.3	4.3	5.4	12	
Cars & Buses	14	286	29	329	20	336	33	389	54	42	23	119	22	38	50	110	947
% Cars & Buses	93.3	98.3	96.7	97.9	95.2	97.4	97.1	97.2	100	95.5	100	98.3	100	90.5	94.3	94	97.2
Trucks	1	5	1	7	1	9	1	11	0	2	0	2	0	4	3	7	27
% Trucks	6.7	1.7	3.3	2.1	4.8	2.6	2.9	2.8	0	4.5	0	1.7	0	9.5	5.7	6	2.8

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Start Date : 03-12-2024
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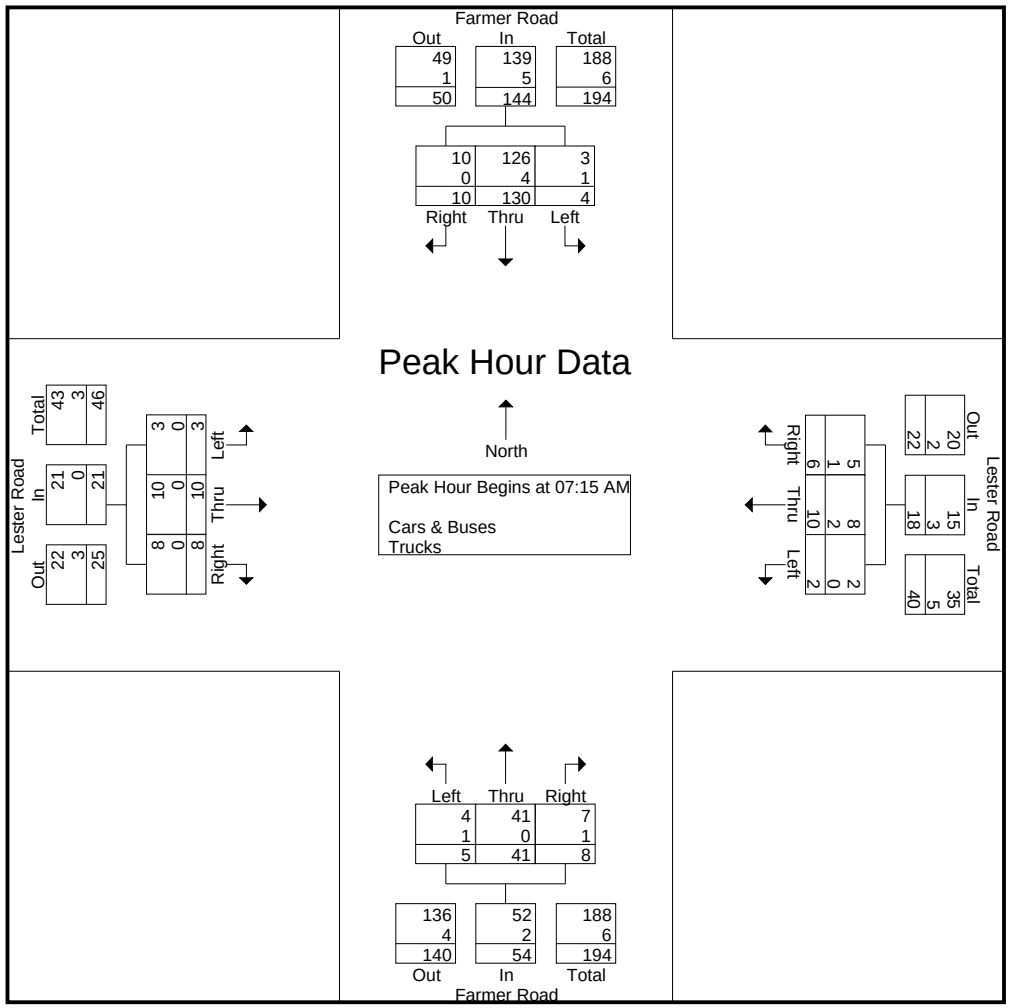
	Farmer Road Northbound				Farmer Road Southbound				Lester Road Eastbound				Lester Road Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	10	**3**	13	**1**	23	**4**	28	**2**	2	1	5	0	2	**3**	5	51
07:30 AM	1	11	2	14	1	37	3	41	0	**4**	2	**6**	0	**3**	1	4	**65**
07:45 AM	1	7	1	9	1	**41**	0	**42**	0	2	2	4	**2**	3	1	**6**	61
08:00 AM	**3**	**13**	2	**18**	1	29	3	33	1	2	**3**	6	0	2	1	3	60
Total Volume	5	41	8	54	4	130	10	144	3	10	8	21	2	10	6	18	237
% App. Total	9.3	75.9	14.8		2.8	90.3	6.9		14.3	47.6	38.1		11.1	55.6	33.3		
PHF	.417	.788	.667	.750	1.00	.793	.625	.857	.375	.625	.667	.875	.250	.833	.500	.750	.912
Cars & Buses	4	41	7	52	3	126	10	139	3	10	8	21	2	8	5	15	227
% Cars & Buses	80.0	100	87.5	96.3	75.0	96.9	100	96.5	100	100	100	100	100	80.0	83.3	83.3	95.8
Trucks	1	0	1	2	1	4	0	5	0	0	0	0	0	2	1	3	10
% Trucks	20.0	0	12.5	3.7	25.0	3.1	0	3.5	0	0	0	0	0	20.0	16.7	16.7	4.2



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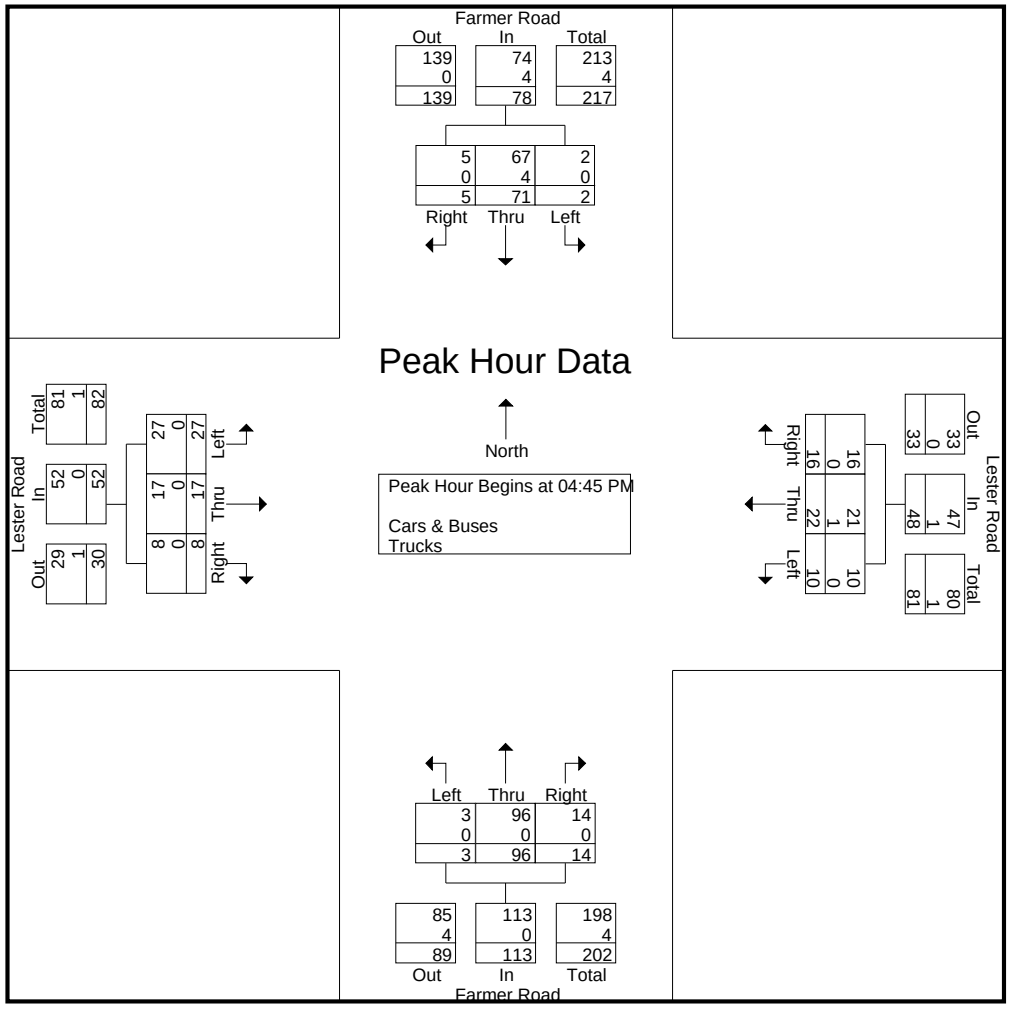
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**2**	21	**4**	27	0	**22**	2	**24**	**12**	2	2	**16**	2	5	**7**	14	81
05:00 PM	0	17	3	20	**1**	21	0	22	6	**6**	1	13	2	4	3	9	64
05:15 PM	0	**31**	4	**35**	1	17	**3**	21	6	4	2	12	**6**	**7**	2	**15**	**83**
05:30 PM	1	27	3	31	0	11	0	11	3	5	**3**	11	0	6	4	10	63
Total Volume	3	96	14	113	2	71	5	78	27	17	8	52	10	22	16	48	291
% App. Total	2.7	85	12.4		2.6	91	6.4		51.9	32.7	15.4		20.8	45.8	33.3		
PHF	.375	.774	.875	.807	.500	.807	.417	.813	.563	.708	.667	.813	.417	.786	.571	.800	.877
Cars & Buses	3	96	14	113	2	67	5	74	27	17	8	52	10	21	16	47	286
% Cars & Buses	100	100	100	100	100	94.4	100	94.9	100	100	100	100	100	95.5	100	97.9	98.3
Trucks	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	1	5
% Trucks	0	0	0	0	0	5.6	0	5.1	0	0	0	0	0	4.5	0	2.1	1.7



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Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
07:00 AM	4	6	0	10	0	1	25	26	14	68	14	2	98	2	86	2	0	90	224
07:15 AM	5	2	1	8	1	4	27	32	12	91	3	1	107	1	110	0	1	112	259
07:30 AM	3	3	1	7	2	1	36	39	18	91	2	3	114	3	114	0	0	117	277
07:45 AM	3	2	2	7	1	6	32	39	8	102	7	6	123	4	136	0	0	140	309
Total	15	13	4	32	4	12	120	136	52	352	26	12	442	10	446	2	1	459	1069
08:00 AM	2	2	1	5	3	6	20	29	15	116	4	1	136	1	80	2	1	84	254
08:15 AM	3	1	1	5	0	3	20	23	12	98	4	1	115	3	132	0	0	135	278
08:30 AM	4	2	2	8	1	5	14	20	11	106	4	0	121	1	85	0	0	86	235
08:45 AM	2	3	1	6	1	0	11	12	11	85	1	1	98	2	105	0	0	107	223
Total	11	8	5	24	5	14	65	84	49	405	13	3	470	7	402	2	1	412	990
*** BREAK ***																			
04:00 PM	4	5	6	15	0	1	20	21	24	133	4	7	168	2	140	2	0	144	348
04:15 PM	4	7	3	14	1	0	23	24	17	145	6	7	175	6	114	3	0	123	336
04:30 PM	8	5	2	15	0	2	18	20	22	133	4	4	163	3	156	0	1	160	358
04:45 PM	10	6	4	20	0	2	25	27	31	160	10	5	206	5	168	0	0	173	426
Total	26	23	15	64	1	5	86	92	94	571	24	23	712	16	578	5	1	600	1468
05:00 PM	2	3	2	7	1	1	17	19	14	150	4	5	173	1	126	1	1	129	328
05:15 PM	5	4	3	12	2	3	19	24	34	188	1	4	227	1	146	0	1	148	411
05:30 PM	7	7	6	20	3	1	10	14	27	150	3	4	184	3	165	0	0	168	386
05:45 PM	6	8	4	18	1	1	27	29	24	163	1	3	191	2	135	1	0	138	376
Total	20	22	15	57	7	6	73	86	99	651	9	16	775	7	572	2	2	583	1501
Grand Total	72	66	39	177	17	37	344	398	294	1979	72	54	2399	40	1998	11	5	2054	5028
Apprch %	40.7	37.3	22		4.3	9.3	86.4		12.3	82.5	3	2.3		1.9	97.3	0.5	0.2		
Total %	1.4	1.3	0.8	3.5	0.3	0.7	6.8	7.9	5.8	39.4	1.4	1.1	47.7	0.8	39.7	0.2	0.1	40.9	
Cars & Buses	63	63	37	163	17	35	335	387	287	1897	64	54	2302	37	1926	8	5	1976	4828
% Cars & Buses	87.5	95.5	94.9	92.1	100	94.6	97.4	97.2	97.6	95.9	88.9	100	96	92.5	96.4	72.7	100	96.2	96
Trucks	9	3	2	14	0	2	9	11	7	82	8	0	97	3	72	3	0	78	200
% Trucks	12.5	4.5	5.1	7.9	0	5.4	2.6	2.8	2.4	4.1	11.1	0	4	7.5	3.6	27.3	0	3.8	4

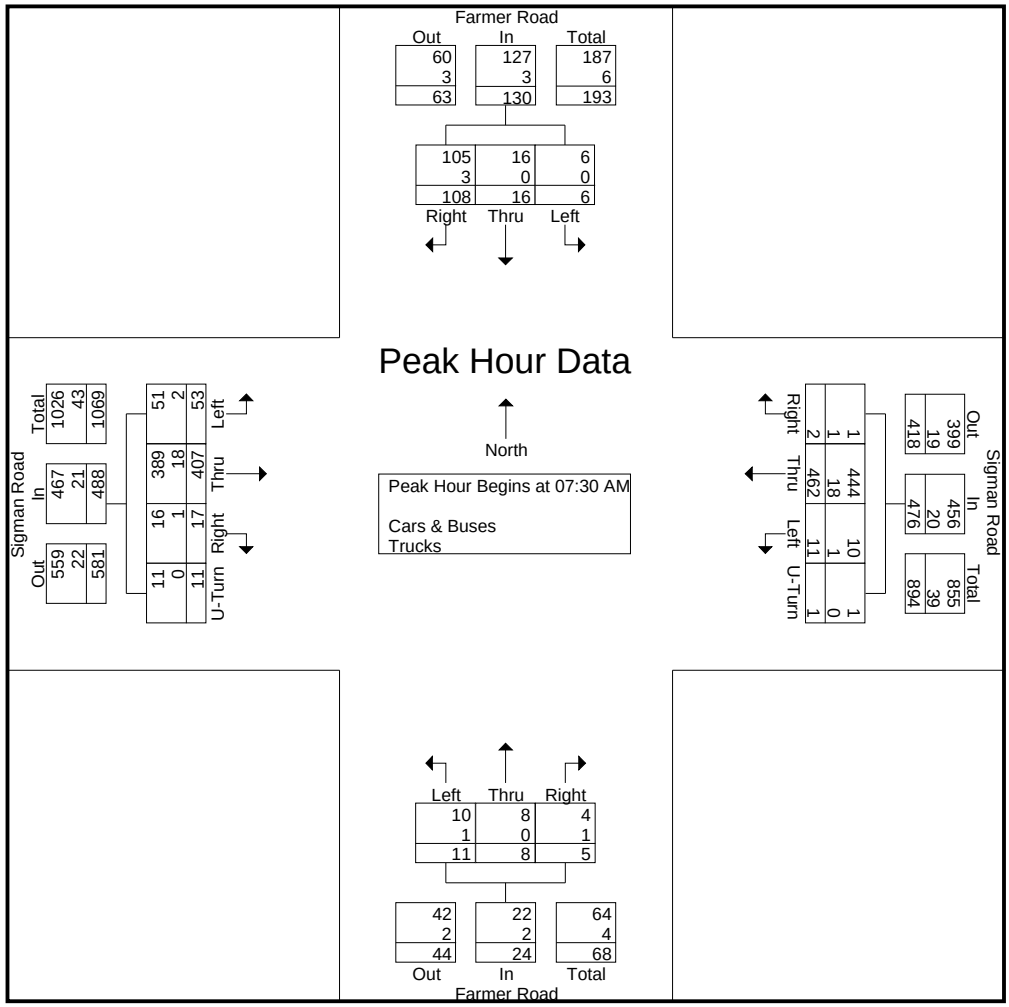
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
Marietta, GA 30067

TMC Data
Sigman Road @ Farmer Road
7-9 am | 4-6 pm

File Name : 20240096
Site Code : 20240096
Start Date : 03-12-2024
Page No : 2

	Farmer Road Northbound				Farmer Road Southbound				Sigman Road Eastbound					Sigman Road Westbound					
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																			
Peak Hour for Entire Intersection Begins at 07:30 AM																			
07:30 AM	**3**	**3**	1	**7**	2	1	**36**	**39**	**18**	91	2	3	114	3	114	0	0	117	277
07:45 AM	3	2	**2**	7	1	**6**	32	39	8	102	**7**	**6**	123	**4**	**136**	0	0	**140**	**309**
08:00 AM	2	2	1	5	**3**	6	20	29	15	**116**	4	1	**136**	1	80	**2**	**1**	84	254
08:15 AM	3	1	1	5	0	3	20	23	12	98	4	1	115	3	132	0	0	135	278
Total Volume	11	8	5	24	6	16	108	130	53	407	17	11	488	11	462	2	1	476	1118
% App. Total	45.8	33.3	20.8		4.6	12.3	83.1		10.9	83.4	3.5	2.3		2.3	97.1	0.4	0.2		
PHF	.917	.667	.625	.857	.500	.667	.750	.833	.736	.877	.607	.458	.897	.688	.849	.250	.250	.850	.905
Cars & Buses	10	8	4	22	6	16	105	127	51	389	16	11	467	10	444	1	1	456	1072
% Cars & Buses	90.9	100	80.0	91.7	100	100	97.2	97.7	96.2	95.6	94.1	100	95.7	90.9	96.1	50.0	100	95.8	95.9
Trucks	1	0	1	2	0	0	3	3	2	18	1	0	21	1	18	1	0	20	46
% Trucks	9.1	0	20.0	8.3	0	0	2.8	2.3	3.8	4.4	5.9	0	4.3	9.1	3.9	50.0	0	4.2	4.1



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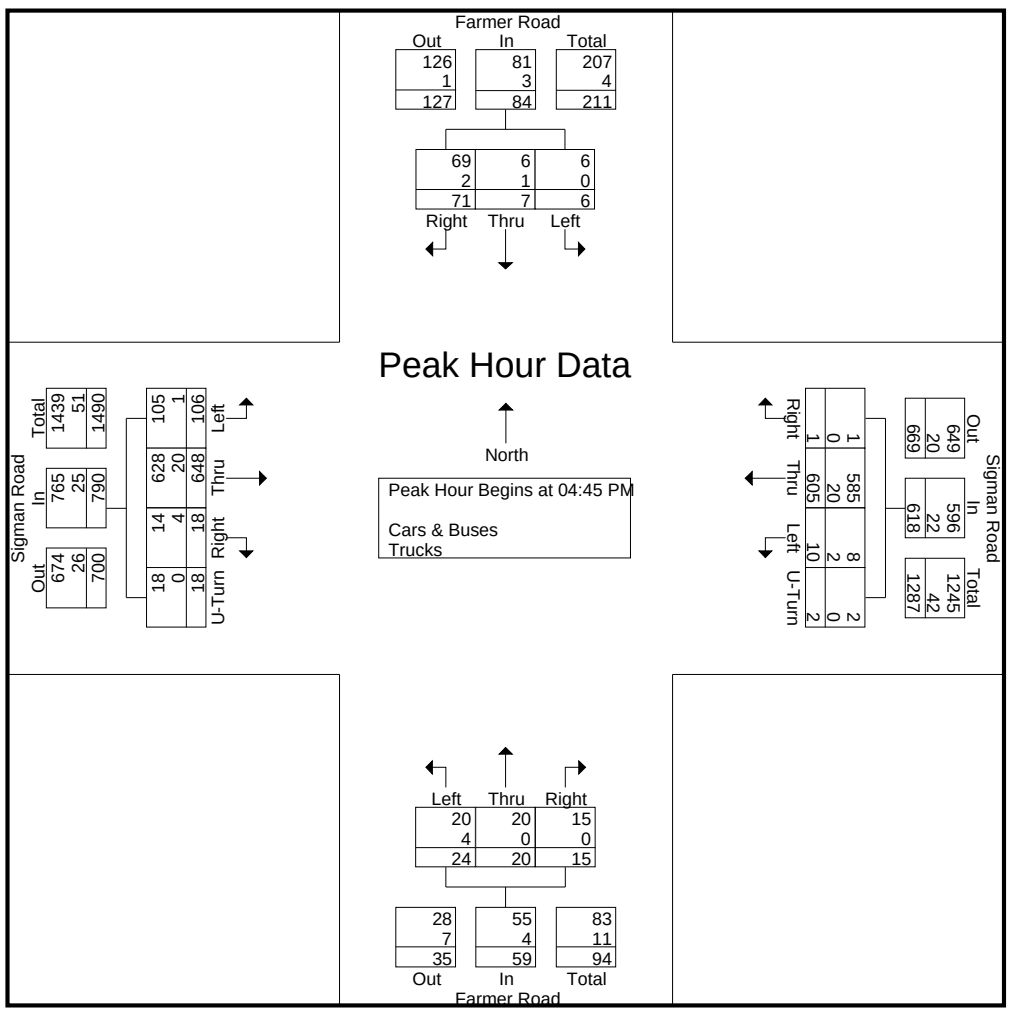
TMC Data
Sigman Road @ Farmer Road
7-9 am | 4-6 pm

File Name : 20240096
Site Code : 20240096
Start Date : 03-12-2024
Page No : 3

	Farmer Road Northbound				Farmer Road Southbound				Sigman Road Eastbound					Sigman Road Westbound					
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																			
Peak Hour for Entire Intersection Begins at 04:45 PM																			
04:45 PM	**10**	6	4	**20**	0	2	**25**	**27**	31	160	**10**	**5**	206	**5**	**168**	0	0	**173**	**426**
05:00 PM	2	3	2	7	1	1	17	19	14	150	4	5	173	1	126	**1**	**1**	129	328
05:15 PM	5	4	3	12	2	**3**	19	24	**34**	**188**	1	4	**227**	1	146	0	1	148	411
05:30 PM	7	**7**	**6**	20	**3**	1	10	14	27	150	3	4	184	3	165	0	0	168	386
Total Volume	24	20	15	59	6	7	71	84	106	648	18	18	790	10	605	1	2	618	1551
% App. Total	40.7	33.9	25.4		7.1	8.3	84.5		13.4	82	2.3	2.3		1.6	97.9	0.2	0.3		
PHF	.600	.714	.625	.738	.500	.583	.710	.778	.779	.862	.450	.900	.870	.500	.900	.250	.500	.893	.910
Cars & Buses	20	20	15	55	6	6	69	81	105	628	14	18	765	8	585	1	2	596	1497
% Cars & Buses	83.3	100	100	93.2	100	85.7	97.2	96.4	99.1	96.9	77.8	100	96.8	80.0	96.7	100	100	96.4	96.5
Trucks	4	0	0	4	0	1	2	3	1	20	4	0	25	2	20	0	0	22	54
% Trucks	16.7	0	0	6.8	0	14.3	2.8	3.6	0.9	3.1	22.2	0	3.2	20.0	3.3	0	0	3.6	3.5



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TMC Data
Sigman Road @ Lester Road
7-9 am | 4-6 pm

File Name : 20240097
Site Code : 20240097
Start Date : 03-12-2024
Page No : 1

Groups Printed- Cars & Buses - Trucks

	Lester Road Northbound				Lester Road Southbound				Sigman Road Eastbound				Sigman Road Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	2	0	1	3	0	0	0	0	4	62	2	68	3	90	1	94	165
07:15 AM	2	2	1	5	1	1	0	2	0	85	9	94	4	104	5	113	214
07:30 AM	0	1	1	2	2	6	2	10	3	87	4	94	2	126	4	132	238
07:45 AM	3	0	2	5	2	1	1	4	2	95	8	105	1	118	1	120	234
Total	7	3	5	15	5	8	3	16	9	329	23	361	10	438	11	459	851
08:00 AM	0	1	5	6	0	0	3	3	2	118	1	121	1	86	2	89	219
08:15 AM	2	1	2	5	0	1	4	5	0	97	2	99	4	123	4	131	240
08:30 AM	1	1	1	3	3	2	1	6	3	102	4	109	2	93	0	95	213
08:45 AM	5	0	2	7	2	1	1	4	2	81	4	87	4	84	9	97	195
Total	8	3	10	21	5	4	9	18	7	398	11	416	11	386	15	412	867
*** BREAK ***																	
04:00 PM	4	2	1	7	5	4	2	11	2	135	2	139	1	121	6	128	285
04:15 PM	3	2	3	8	8	1	0	9	7	137	5	149	2	117	4	123	289
04:30 PM	4	2	2	8	4	1	4	9	5	128	3	136	2	175	10	187	340
04:45 PM	12	6	8	26	6	1	3	10	5	157	2	164	12	137	7	156	356
Total	23	12	14	49	23	7	9	39	19	557	12	588	17	550	27	594	1270
05:00 PM	15	4	12	31	5	2	2	9	2	149	3	154	12	134	6	152	346
05:15 PM	14	6	13	33	9	1	1	11	5	185	4	194	9	145	4	158	396
05:30 PM	10	5	5	20	4	3	1	8	4	150	5	159	9	159	5	173	360
05:45 PM	7	3	7	17	4	2	2	8	5	162	1	168	4	123	3	130	323
Total	46	18	37	101	22	8	6	36	16	646	13	675	34	561	18	613	1425
Grand Total	84	36	66	186	55	27	27	109	51	1930	59	2040	72	1935	71	2078	4413
Apprch %	45.2	19.4	35.5		50.5	24.8	24.8		2.5	94.6	2.9		3.5	93.1	3.4		
Total %	1.9	0.8	1.5	4.2	1.2	0.6	0.6	2.5	1.2	43.7	1.3	46.2	1.6	43.8	1.6	47.1	
Cars & Buses	62	35	56	153	53	27	26	106	36	1879	41	1956	69	1874	65	2008	4223
% Cars & Buses	73.8	97.2	84.8	82.3	96.4	100	96.3	97.2	70.6	97.4	69.5	95.9	95.8	96.8	91.5	96.6	95.7
Trucks	22	1	10	33	2	0	1	3	15	51	18	84	3	61	6	70	190
% Trucks	26.2	2.8	15.2	17.7	3.6	0	3.7	2.8	29.4	2.6	30.5	4.1	4.2	3.2	8.5	3.4	4.3

A & R Engineering, Inc.

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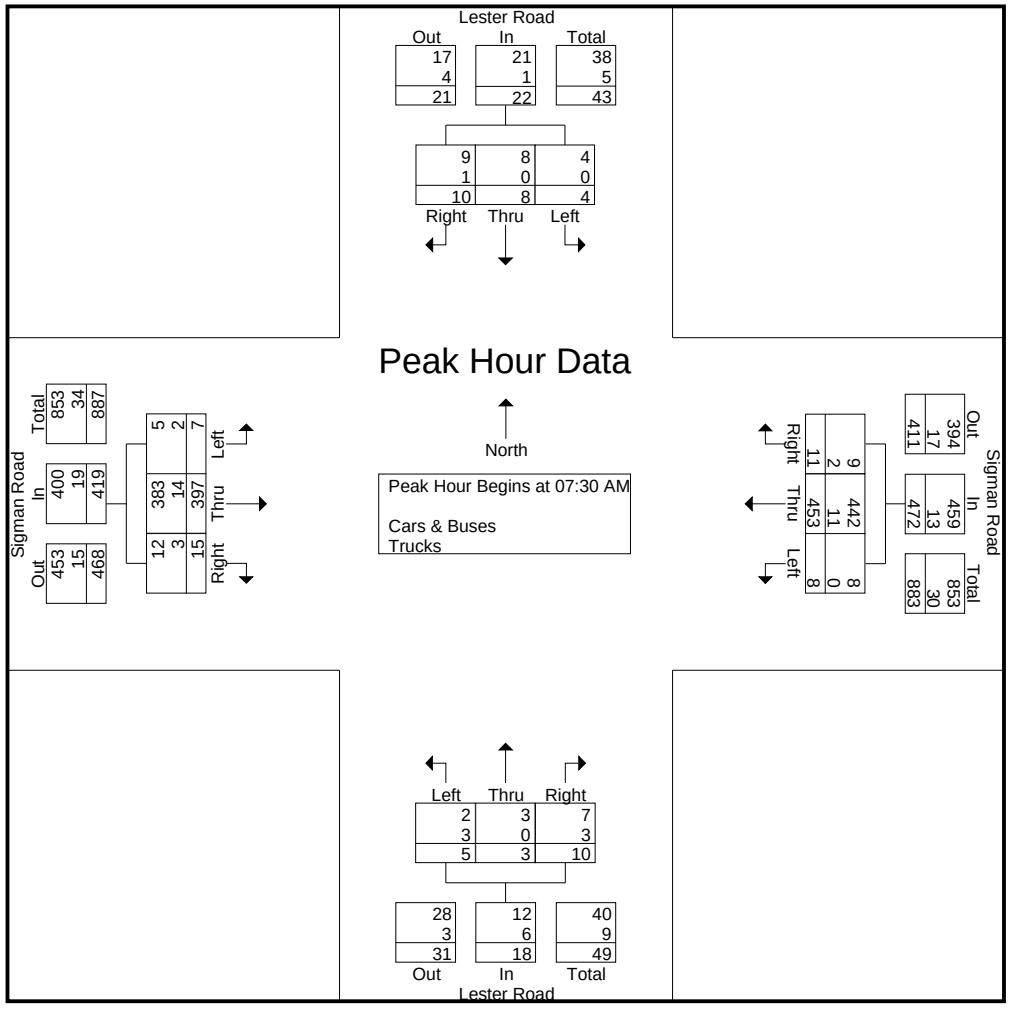
TMC Data
Sigman Road @ Lester Road
7-9 am | 4-6 pm

File Name : 20240097
Site Code : 20240097
Start Date : 03-12-2024
Page No : 2

	Lester Road Northbound				Lester Road Southbound				Sigman Road Eastbound				Sigman Road Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	**1**	1	2	**2**	**6**	2	**10**	**3**	87	4	94	2	**126**	**4**	**132**	238
07:45 AM	**3**	0	2	5	2	1	1	4	2	95	**8**	105	1	118	1	120	234
08:00 AM	0	1	**5**	**6**	0	0	3	3	2	**118**	1	**121**	1	86	2	89	219
08:15 AM	2	1	2	5	0	1	**4**	5	0	97	2	99	**4**	123	4	131	**240**
Total Volume	5	3	10	18	4	8	10	22	7	397	15	419	8	453	11	472	931
% App. Total	27.8	16.7	55.6		18.2	36.4	45.5		1.7	94.7	3.6		1.7	96	2.3		
PHF	.417	.750	.500	.750	.500	.333	.625	.550	.583	.841	.469	.866	.500	.899	.688	.894	.970
Cars & Buses	2	3	7	12	4	8	9	21	5	383	12	400	8	442	9	459	892
% Cars & Buses	40.0	100	70.0	66.7	100	100	90.0	95.5	71.4	96.5	80.0	95.5	100	97.6	81.8	97.2	95.8
Trucks	3	0	3	6	0	0	1	1	2	14	3	19	0	11	2	13	39
% Trucks	60.0	0	30.0	33.3	0	0	10.0	4.5	28.6	3.5	20.0	4.5	0	2.4	18.2	2.8	4.2



A & R Engineering, Inc.

2160 Kingston Court, Suite 'O'
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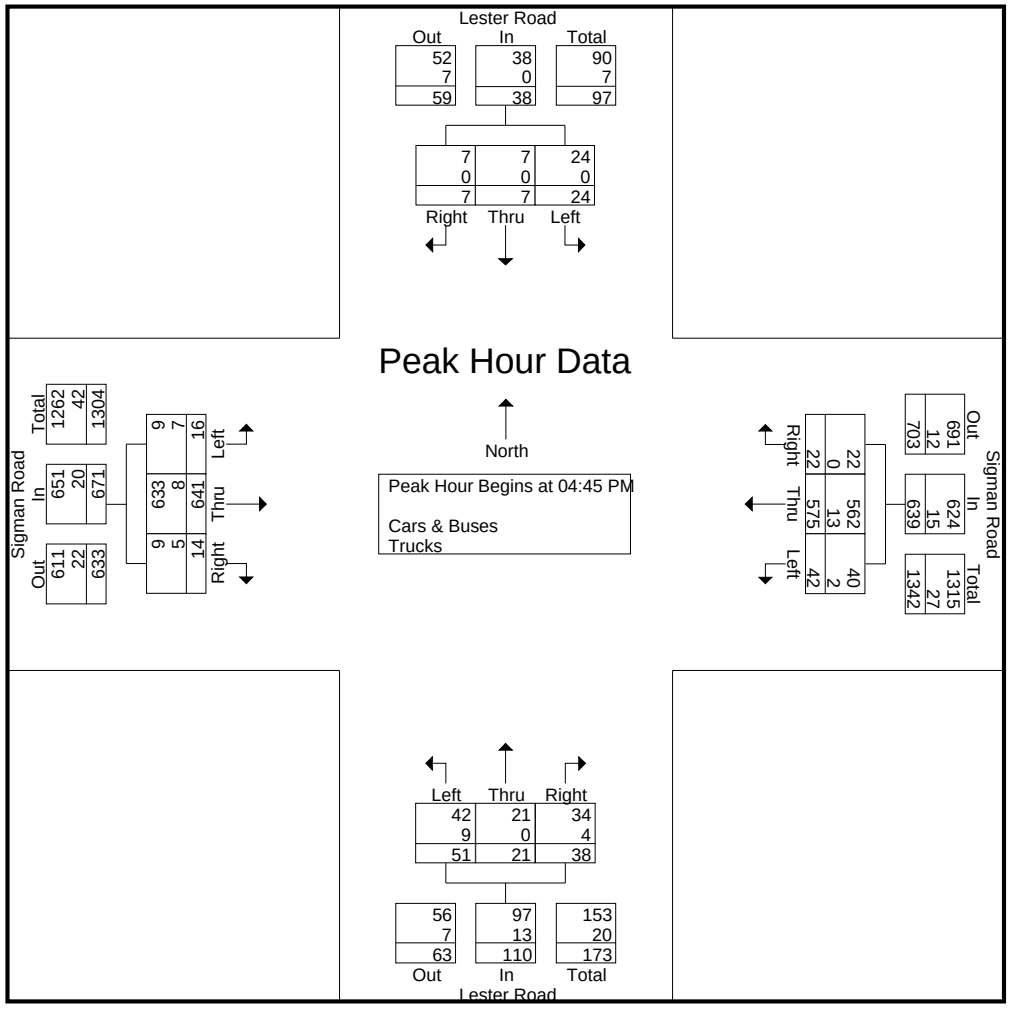
TMC Data
Sigman Road @ Lester Road
7-9 am | 4-6 pm

File Name : 20240097
Site Code : 20240097
Start Date : 03-12-2024
Page No : 3

	Lester Road Northbound				Lester Road Southbound				Sigman Road Eastbound				Sigman Road Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	12	**6**	8	26	6	1	**3**	10	**5**	157	2	164	**12**	137	**7**	156	356
05:00 PM	**15**	4	12	31	5	2	2	9	2	149	3	154	12	134	6	152	346
05:15 PM	14	6	**13**	**33**	**9**	1	1	**11**	5	**185**	4	**194**	9	145	4	158	**396**
05:30 PM	10	5	5	20	4	**3**	1	8	4	150	**5**	159	9	**159**	5	**173**	360
Total Volume	51	21	38	110	24	7	7	38	16	641	14	671	42	575	22	639	1458
% App. Total	46.4	19.1	34.5		63.2	18.4	18.4		2.4	95.5	2.1		6.6	90	3.4		
PHF	.850	.875	.731	.833	.667	.583	.583	.864	.800	.866	.700	.865	.875	.904	.786	.923	.920
Cars & Buses	42	21	34	97	24	7	7	38	9	633	9	651	40	562	22	624	1410
% Cars & Buses	82.4	100	89.5	88.2	100	100	100	100	56.3	98.8	64.3	97.0	95.2	97.7	100	97.7	96.7
Trucks	9	0	4	13	0	0	0	0	7	8	5	20	2	13	0	15	48
% Trucks	17.6	0	10.5	11.8	0	0	0	0	43.8	1.2	35.7	3.0	4.8	2.3	0	2.3	3.3



GRTA Letter of Understanding

LETTER OF UNDERSTANDING

March 19, 2024

Chip Scaglione
DC BLOX
1040 Crown Pointe Parkway, Suite 560
Atlanta, Georgia 30338

RE: **DC BLOX - ATL East Data Center (DRI#: 4120)**

Dear Chip Scaglione:

The purpose of this Letter of Understanding is to document the discussions during the Methodology Meeting held virtually on February 26, 2024, regarding **DC BLOX - ATL East Data Center DRI#: 4120** Development of Regional Impact (DRI). The *GRTA DRI Review Procedures*, as well as the inputs and parameters documented in this Letter of Understanding and the revised Methodology Meeting Packet (sent on March 13,2024), shall be adhered to in preparing the GRTA required Transportation Study.

PROJECT OVERVIEW

- The proposed site is located at 1726 & 1830 Farmer Rd NW, Rockdale County, GA 30012. The development is located on Farmer Road in Rockdale County. In general, the site is located to the west of Farmer Road NW and north of Lester Road. Latitude: 33° 41' 28.12" N, Longitude: 84° 2' 47.57" W.
- The proposed development includes three data center buildings (30MW with 254,977 SF, 80MW with 498,315 SF and 40MW with 263,536 SF respectively) for a combined total of 1,016,828 SF.
-
- The projected build-out is one phase to be completed by 2026.
- The proposed development includes (2) site accesses along Farmer Road NW (Full Access) and Lester Road NW (Full Access).
- The DRI trigger for this development is a Land Disturbance Permit (LDP).
- The vehicular trip generation is estimated to be 1,007 net daily trips based on the *ITE Trip Generation Manual 11th edition.*
- The applicant is applying for approval under GRTA's expedited Traffic Impact Study review process.

STUDY NETWORK

1. Farmer Road NW @ Lester Road NW
2. Lester Road NW @ Site Driveway 1
3. Farmer Road NW @ Site Driveway 2
4. Sigman Road @ Farmer Road
5. Sigman Road @ Lester Road

METHODOLOGY MEETING PACKET INPUTS & PARAMETERS

- The Site Plan shall meet all the applicable requirements in Section 7.1 of the *GRTA DRI Review Procedures*.
- All Study Network intersections shall be analyzed during the AM and PM peak hours for (1) existing conditions, (2) future "no-build" conditions, and (3) future "build" conditions as specified in the *GRTA DRI Review Procedures*.

- This DRI shall be modeled and reviewed in one phase to be completed by 2026.

- The Level of Service (LOS) standard for all analysis shall be LOS D unless specified otherwise in Section 3.2.2.1. For example, a LOS E standard is allowed if the existing LOS for the intersection or approach is a LOS F.

- Default values should not be assumed in the traffic modeling. Existing conditions shall be taken into account as required in Section 3.2.2.

- The trip generation calculations in the revised Methodology Meeting Packet shall be used in the Transportation Study. Mixed-use and pass-by reductions are not allowed for this site. Pass-by reductions shall not exceed 15% of a roadway's traffic volume standard established in Appendix 7.2.

- The trip assignment approach in the revised Methodology Meeting Packet shall be utilized for all Study Network intersection movements.

- The applicant shall research TIP, STIP, RTP and GDOT's construction work program, as well as any local government and transit operator plans (SPLOST, CIP, etc.), to determine the open date, sponsor, cost of the project, funding source(s), for future roadway projects in the project vicinity. Programmed transportation projects anticipated to open on or before the Build Out year of the DRI Project shall be modeled as completed in the No-Build and Build conditions unless approved otherwise.

- A 1% annual traffic Background Growth Rate shall be used for all roadways.

- Capacity analysis shall be based on turning movement counts collected not more than 12-months prior to the date of the actual DRI submittal to GRTA, unless specified otherwise. As specified in Section 2.3, turning movement counts shall be collected while local schools are in session, on a Tuesday, Wednesday or Thursday (unless approved otherwise) and not during holiday periods (weeks of July 4th, Thanksgiving and +/- 5 days of Christmas).

- If the *GRTA DRI Review Procedures* requires an Enhanced Focus Area for Heavy Vehicles or an Enhanced Focus Area for Dense Urban Environments, the Transportation Study shall incorporate the inputs and parameters agreed to at the Methodology Meeting and documented in the revised Methodology Meeting Packet. These inputs may include a Heavy Vehicle modeling percentages, a Heavy Vehicle route map, a pedestrian crosswalk delay adjustment and a bus blockage adjustment factor.

ADDITIONAL REQUIREMENTS

All applicable requirements of the *GRTA DRI Review Procedures* must be met for the Transportation Study to be considered complete. The *GRTA DRI Review Procedures* are located on GRTA's DRI website: https://www.srta.ga.gov/programs-projects/dev-of-regional-impact/ Contact GRTA staff if you have any questions on these requirements.

The Transportation Study shall also include as attachments the native LOS modeling file (i.e., Synchro modeling files) as well as the modeling reports (PDFs) for all Study Network intersections for the Existing, No-Build and Build conditions for all phases. The PDF reports shall be numbered (in page headers) and organized in order according to the Study Network numbering sequence in this Letter of Understanding. The reports shall also be organized in the following sequence: *Existing condition AM, Existing condition PM, No-build condition AM, No-Build condition PM, Build condition AM, Build condition PM*. If improvements are modeled, those PDFs shall be labeled as such and follow the appropriate condition's applicable peak period.

The Transportation Study appendices shall also include all turning movement count data, regardless of if using historic data or newly collected turning movement counts.

When documenting any Queue Length impacts required in Section 3.2.3.6, the TIS Executive Summary shall also note any individual *movements* not meeting the LOS standard where the DRI Project adds trips in the Build condition and exceeds available storage capacity for that movement.

When identifying mitigations in the existing, no-build and build conditions, the mitigations identified in preceding conditions shall not be modeled as complete when conducting the LOS analysis. The same mitigation may still be proposed as mitigation in the subsequent condition but it shall not be included as completed in the default analysis. For example, a turn lane may be identified as a needed improvement in the no-build condition. The turn lane should not be modeled as completed in the build condition. The turn lane should only be modeled as complete in the no-build with improvements condition and the build with improvements condition.

DRI REVIEW PACKAGE SUBMITTAL

GRTA will begin reviewing the DRI once the DRI Review Package is submitted and deemed complete. The DRI Review Package includes: the permitting Local Government inputting both Department of Community Affairs (DCA) forms into the DCA DRI website; and the **Traffic Engineer submittal of the GRTA Transportation Study (including LOS appendices, traffic count data and any other required attachments) and Site Plan to GRTA staff and ALL stakeholders included in the CC list of this Letter of Understanding**.

All DRI Review Packages shall be submitted electronically via email to all stakeholders in the CC list of the Letter of Understanding. If the DRI Review Package total file size is greater than 10 MB, the DRI Review Package shall be submitted via email with a FTP link provided for downloading the files.

Please contact me if you have any questions about the Letter of Understanding or the *GRTA DRI Review Procedures*.

Sincerely,

Brittany Williams
Program Manager

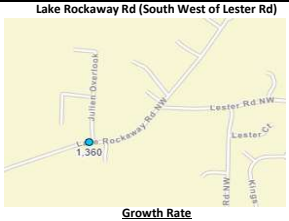
Cc:

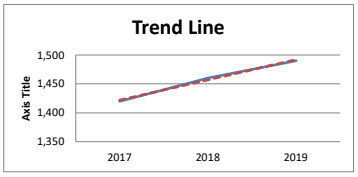
Brittany Williams, GRTA/SRTA/ATL
Chirag Date, Modern Mobility Partners
Donald Shockey, ARC
Reginald James, ARC
Celine Benoit, ARC
Perry Landon, GDOT
Cleopatra C. Vicks, GDOT
Ashley Cowan, GDOT
Christopher Wheeler, Rockdale County
Denise Tugman, Rockdale County
Aprell L. King, Dekalb County
Chip Scaglione, DC BLOX, Developer
Abdul Amer, A&R Engineering
Naila Amer, A&R Engineering
Jason Seaman, Thomas & Hutton
Scott Gaither, City of Conyers

Linear Regression of Daily Traffic

Location	Growth Rate	R Squared	Station ID	Route	2017	2018	2019
Lake Rockaway Rd (South West of Lester Rd)	2.4%	0.99	247-8023	00008200	1,420	1,460	1,490
Rockbridge Rd (South East of Farmer Rd)	0.4%	0.75	247-0145	00007400	2,690	2,690	2,710
Irwin Bridge Rd (North of North Main St)	1.8%	0.99	247-0198	00204701	4,130	4,190	4,280
Rockdale Industrial Blvd (West of Lester Rd)	1.9%	0.99	247-8021	00007300	1,850	1,880	1,920
Old Covington Hwy (North West of Plunkett Road	0.8%	0.99	247-0185	00020800	9,030	9,110	9,170
Weighted Average	**1.2%**	1.00	Sum of Count Stations =		19,120	19,330	19,570

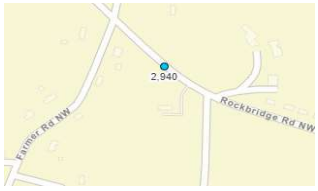
Location	Traffic Counter	RCLINK	2017	2018	2019
Lake Rockaway Rd (South West of Lester Rd)	247-8023	00008200	1,420	1,460	1,490

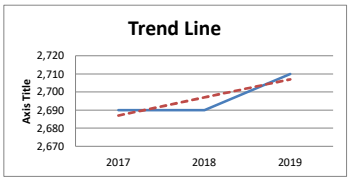




Growth Rate	2.4%	Intercept	-69,173	Slope	35.00
Trend Line			1,422	1,457	1,492

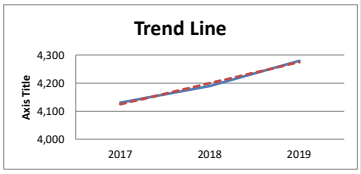
Location	Traffic Counter	RCLINK	2017	2018	2019
Rockbridge Rd (South East of Farmer Rd)	247-0145	00007400	2,690	2,690	2,710





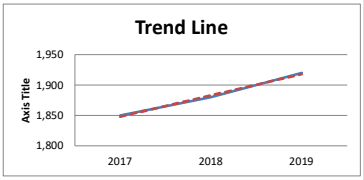
Growth Rate	0.4%	Intercept	-17,483	Slope	10.00
Trend Line			2,687	2,697	2,707

Location	Traffic Counter	RCLINK	2017	2018	2019
Irwin Bridge Rd (North of North Main St)	247-0198	00204701	4,130	4,190	4,280



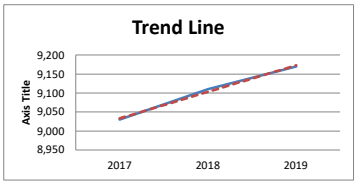
Growth Rate	1.8%	Intercept	-147,150	Slope	75.00
Trend Line			4,125	4,200	4,275

Location	Traffic Counter	RCLINK	2017	2018	2019
Rockdale Industrial Blvd (West of Lester Rd)	247-8021	00007300	1,850	1,880	1,920



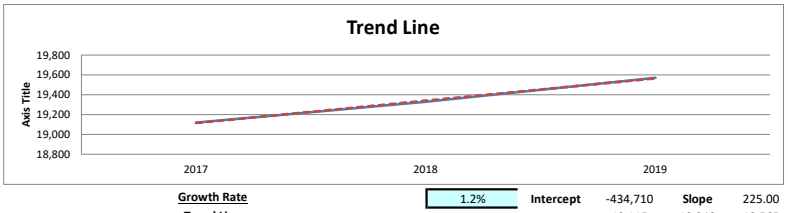
Growth Rate	1.9%	Intercept	-68,747	Slope	35.00
Trend Line			1,848	1,883	1,918

Location	Traffic Counter	RCLINK	2017	2018	2019
Old Covington Hwy (North West of Plunkett Road)	247-0185	00020800	9,030	9,110	9,170



Growth Rate	0.8%	Intercept	-132,157	Slope	70.00
Trend Line			9,033	9,103	9,173

Weighted Average	2017	2018	2019
Sum of Count Stations	19,120	19,330	19,570



Growth Rate	1.2%	Intercept	-434,710	Slope	225.00
Trend Line			19,115	19,340	19,565

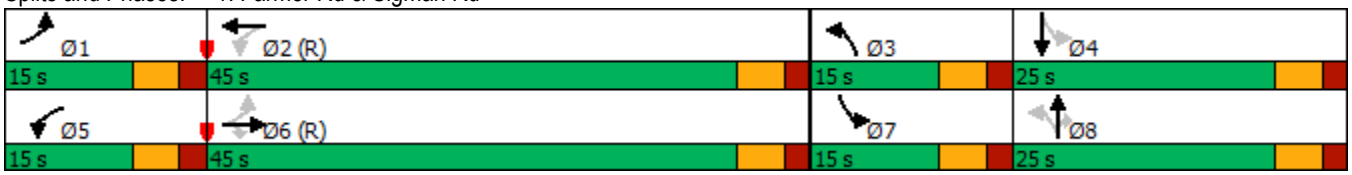
Existing Intersection Analysis

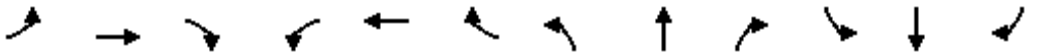
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	64	407	17	12	462	11	8	5	6	16
Future Volume (vph)	64	407	17	12	462	11	8	5	6	16
Lane Group Flow (vph)	70	447	19	13	510	12	9	5	7	137
Turn Type	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	1	6		5	2	3	8		7	4
Permitted Phases	6		6	2		8		8	4	
Detector Phase	1	6	6	5	2	3	8	8	7	4
Switch Phase										
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	5.0	6.0	6.0	5.0	6.0
Minimum Split (s)	15.0	33.5	33.5	15.0	30.5	15.0	37.5	37.5	15.0	41.5
Total Split (s)	15.0	45.0	45.0	15.0	45.0	15.0	25.0	25.0	15.0	25.0
Total Split (%)	15.0%	45.0%	45.0%	15.0%	45.0%	15.0%	25.0%	25.0%	15.0%	25.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	None	None	None	None	None
v/c Ratio	0.10	0.17	0.02	0.02	0.22	0.09	0.06	0.02	0.05	0.58
Control Delay	4.2	5.4	0.0	4.7	7.2	36.7	40.9	0.2	35.3	20.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.2	5.4	0.0	4.7	7.2	36.7	40.9	0.2	35.3	20.8
Queue Length 50th (ft)	6	21	0	1	53	7	6	0	4	11
Queue Length 95th (ft)	32	109	0	10	81	20	20	0	15	66
Internal Link Dist (ft)		598			1634		711			1203
Turn Bay Length (ft)	330		165	365		80		80	60	
Base Capacity (vph)	693	2638	1193	722	2343	179	363	380	203	409
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.17	0.02	0.02	0.22	0.07	0.02	0.01	0.03	0.33

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 105
Control Type: Actuated-Coordinated

Splits and Phases: 1: Farmer Rd & Sigman Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	407	17	12	462	2	11	8	5	6	16	108
Future Volume (veh/h)	64	407	17	12	462	2	11	8	5	6	16	108
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1811	1767	1841	1159	1767	1870	1604	1870	1870	1856
Adj Flow Rate, veh/h	70	447	19	13	508	2	12	9	5	7	18	119
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	4	4	6	9	4	50	9	2	20	2	2	3
Cap, veh/h	688	2256	990	617	2205	9	123	208	151	236	22	148
Arrive On Green	0.04	0.64	0.64	0.03	1.00	1.00	0.01	0.11	0.11	0.01	0.11	0.11
Sat Flow, veh/h	1753	3497	1535	1682	3573	14	1682	1870	1359	1781	213	1405
Grp Volume(v), veh/h	70	447	19	13	249	261	12	9	5	7	0	137
Grp Sat Flow(s),veh/h/ln	1753	1749	1535	1682	1749	1838	1682	1870	1359	1781	0	1617
Q Serve(g_s), s	1.4	5.2	0.4	0.3	0.0	0.0	0.6	0.4	0.3	0.3	0.0	8.3
Cycle Q Clear(g_c), s	1.4	5.2	0.4	0.3	0.0	0.0	0.6	0.4	0.3	0.3	0.0	8.3
Prop In Lane	1.00		1.00	1.00		0.01	1.00		1.00	1.00		0.87
Lane Grp Cap(c), veh/h	688	2256	990	617	1079	1135	123	208	151	236	0	171
V/C Ratio(X)	0.10	0.20	0.02	0.02	0.23	0.23	0.10	0.04	0.03	0.03	0.00	0.80
Avail Cap(c_a), veh/h	779	2256	990	751	1079	1135	259	365	265	389	0	315
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.99	0.99	0.99	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.0	7.2	6.4	6.7	0.0	0.0	39.4	39.7	39.7	39.4	0.0	43.7
Incr Delay (d2), s/veh	0.1	0.2	0.0	0.0	0.5	0.5	0.3	0.1	0.1	0.1	0.0	8.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.8	0.1	0.1	0.1	0.1	0.3	0.2	0.1	0.2	0.0	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.1	7.4	6.4	6.7	0.5	0.5	39.7	39.8	39.7	39.4	0.0	52.1
LnGrp LOS	A	A	A	A	A	A	D	D	D	D	A	D
Approach Vol, veh/h		536			523			26			144	
Approach Delay, s/veh		7.2			0.6			39.7			51.5	
Approach LOS		A			A			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	67.2	6.9	16.1	7.0	70.0	6.4	16.6
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	9.5	39.5	9.5	19.5	9.5	39.5	9.5	19.5
Max Q Clear Time (g_c+I1), s	3.4	2.0	2.6	10.3	2.3	7.2	2.3	2.4
Green Ext Time (p_c), s	0.1	6.1	0.0	0.4	0.0	6.1	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	10.3
HCM 6th LOS	B

Notes

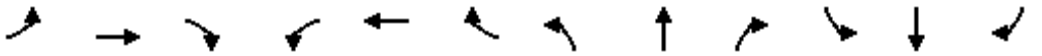
User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	7	397	15	8	453	5	3	10	4	8	10
Future Volume (vph)	7	397	15	8	453	5	3	10	4	8	10
Lane Group Flow (vph)	7	409	15	8	478	5	3	10	4	8	10
Turn Type	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2	3	8		7	4	
Permitted Phases	6		6	2		8		8	4		4
Detector Phase	1	6	6	5	2	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	5.0	6.0	6.0	5.0	6.0	6.0
Minimum Split (s)	15.0	25.5	25.5	15.0	25.5	15.0	35.5	35.5	15.0	41.5	41.5
Total Split (s)	15.0	50.0	50.0	15.0	50.0	15.0	20.0	20.0	15.0	20.0	20.0
Total Split (%)	15.0%	50.0%	50.0%	15.0%	50.0%	15.0%	20.0%	20.0%	15.0%	20.0%	20.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	None	None	None	None	None	None
v/c Ratio	0.01	0.13	0.01	0.01	0.15	0.06	0.03	0.05	0.03	0.07	0.04
Control Delay	3.1	2.9	0.0	3.2	3.5	39.2	43.7	0.4	39.0	45.0	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	3.1	2.9	0.0	3.2	3.5	39.2	43.7	0.4	39.0	45.0	0.4
Queue Length 50th (ft)	0	0	0	0	0	3	2	0	3	5	0
Queue Length 95th (ft)	5	58	0	6	101	13	11	0	12	19	1
Internal Link Dist (ft)		1634			1177		418			1048	
Turn Bay Length (ft)	365		330	380		100		135	85		125
Base Capacity (vph)	676	3058	1203	904	3095	126	270	305	195	270	338
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.13	0.01	0.01	0.15	0.04	0.01	0.03	0.02	0.03	0.03

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 2: Lester Rd & Sigman Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	397	15	8	453	11	5	3	10	4	8	10
Future Volume (veh/h)	7	397	15	8	453	11	5	3	10	4	8	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1470	1841	1604	1870	1870	1633	1011	1870	1455	1870	1870	1752
Adj Flow Rate, veh/h	7	409	15	8	467	11	5	3	0	4	8	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	29	4	20	2	2	18	60	2	30	2	2	10
Cap, veh/h	593	2599	1010	806	2641	62	91	41		110	38	
Arrive On Green	0.02	1.00	1.00	0.01	0.74	0.74	0.01	0.02	0.00	0.01	0.02	0.00
Sat Flow, veh/h	1400	3497	1359	1781	3549	84	963	1870	1233	1781	1870	1485
Grp Volume(v), veh/h	7	409	15	8	234	244	5	3	0	4	8	0
Grp Sat Flow(s),veh/h/ln	1400	1749	1359	1781	1777	1855	963	1870	1233	1781	1870	1485
Q Serve(g_s), s	0.1	0.0	0.0	0.1	3.9	3.9	0.5	0.2	0.0	0.2	0.4	0.0
Cycle Q Clear(g_c), s	0.1	0.0	0.0	0.1	3.9	3.9	0.5	0.2	0.0	0.2	0.4	0.0
Prop In Lane	1.00		1.00	1.00		0.05	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	593	2599	1010	806	1322	1381	91	41		110	38	
V/C Ratio(X)	0.01	0.16	0.01	0.01	0.18	0.18	0.06	0.07		0.04	0.21	
Avail Cap(c_a), veh/h	713	2599	1010	957	1322	1381	176	271		270	271	
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.99	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	3.1	0.0	0.0	3.1	3.8	3.8	47.6	47.9	0.0	47.6	48.2	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.3	0.3	0.3	0.8	0.0	0.1	2.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	1.2	1.2	0.1	0.1	0.0	0.1	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.1	0.1	0.0	3.1	4.1	4.0	47.8	48.7	0.0	47.7	50.9	0.0
LnGrp LOS	A	A	A	A	A	A	D	D		D	D	
Approach Vol, veh/h		431			486			8			12	
Approach Delay, s/veh		0.2			4.0			48.2			49.8	
Approach LOS		A			A			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.4	79.9	6.1	7.5	6.5	79.8	6.0	7.7
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	9.5	44.5	9.5	14.5	9.5	44.5	9.5	14.5
Max Q Clear Time (g_c+I1), s	2.1	5.9	2.5	2.4	2.1	2.0	2.2	2.2
Green Ext Time (p_c), s	0.0	6.1	0.0	0.0	0.0	5.8	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	3.2
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	10	8	2	10	6	5	41	8	4	130	10
Future Vol, veh/h	3	10	8	2	10	6	5	41	8	4	130	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	20	17	20	2	13	25	3	2
Mvmt Flow	3	11	9	2	11	7	5	45	9	4	143	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	226	221	149	227	222	50	154	0	0	54	0	0
Stage 1	157	157	-	60	60	-	-	-	-	-	-	-
Stage 2	69	64	-	167	162	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.7	6.37	4.3	-	-	4.35	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.7	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.7	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.18	3.453	2.38	-	-	2.425	-	-
Pot Cap-1 Maneuver	729	678	898	728	646	977	1324	-	-	1416	-	-
Stage 1	845	768	-	951	811	-	-	-	-	-	-	-
Stage 2	941	842	-	835	731	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	711	673	898	708	641	977	1324	-	-	1416	-	-
Mov Cap-2 Maneuver	711	673	-	708	641	-	-	-	-	-	-	-
Stage 1	842	766	-	947	808	-	-	-	-	-	-	-
Stage 2	918	839	-	813	729	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10	10	0.7	0.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1324	-	-	750	733	1416	-	-
HCM Lane V/C Ratio	0.004	-	-	0.031	0.027	0.003	-	-
HCM Control Delay (s)	7.7	0	-	10	10	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	124	648	18	12	605	24	20	15	6	7
Future Volume (vph)	124	648	18	12	605	24	20	15	6	7
Lane Group Flow (vph)	136	712	20	13	666	26	22	16	7	86
Turn Type	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	1	6		5	2	3	8		7	4
Permitted Phases	6		6	2		8		8	4	
Detector Phase	1	6	6	5	2	3	8	8	7	4
Switch Phase										
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	5.0	6.0	6.0	5.0	6.0
Minimum Split (s)	15.0	33.5	33.5	15.0	30.5	15.0	37.5	37.5	15.0	41.5
Total Split (s)	15.0	45.0	45.0	15.0	45.0	15.0	25.0	25.0	15.0	25.0
Total Split (%)	15.0%	45.0%	45.0%	15.0%	45.0%	15.0%	25.0%	25.0%	15.0%	25.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	None	None	None	None	None
v/c Ratio	0.23	0.26	0.02	0.03	0.30	0.17	0.11	0.05	0.04	0.46
Control Delay	5.4	6.4	0.1	5.2	8.6	36.2	39.3	0.3	32.3	20.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.4	6.4	0.1	5.2	8.6	36.2	39.3	0.3	32.3	20.0
Queue Length 50th (ft)	12	37	0	1	69	16	14	0	4	5
Queue Length 95th (ft)	54	179	0	m9	111	34	36	0	15	50
Internal Link Dist (ft)		598			1634		711			1203
Turn Bay Length (ft)	330		165	365		80		80	60	
Base Capacity (vph)	605	2701	1054	526	2230	190	369	431	219	370
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.26	0.02	0.02	0.30	0.14	0.06	0.04	0.03	0.23

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 105
Control Type: Actuated-Coordinated
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Farmer Rd & Sigman Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	648	18	12	605	1	24	20	15	6	7	71
Future Volume (veh/h)	124	648	18	12	605	1	24	20	15	6	7	71
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1856	1574	1604	1856	1870	1648	1870	1870	1870	1693	1856
Adj Flow Rate, veh/h	136	712	20	13	665	1	26	22	16	7	8	78
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	3	22	20	3	2	17	2	2	2	14	3
Cap, veh/h	642	2329	881	452	2265	3	136	178	151	195	11	104
Arrive On Green	0.05	0.66	0.66	0.03	1.00	1.00	0.03	0.10	0.10	0.01	0.08	0.08
Sat Flow, veh/h	1781	3526	1334	1527	3612	5	1570	1870	1585	1781	135	1320
Grp Volume(v), veh/h	136	712	20	13	325	341	26	22	16	7	0	86
Grp Sat Flow(s),veh/h/ln	1781	1763	1334	1527	1763	1855	1570	1870	1585	1781	0	1455
Q Serve(g_s), s	2.7	8.6	0.5	0.3	0.0	0.0	1.5	1.1	0.9	0.4	0.0	5.8
Cycle Q Clear(g_c), s	2.7	8.6	0.5	0.3	0.0	0.0	1.5	1.1	0.9	0.4	0.0	5.8
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		0.91
Lane Grp Cap(c), veh/h	642	2329	881	452	1105	1163	136	178	151	195	0	114
V/C Ratio(X)	0.21	0.31	0.02	0.03	0.29	0.29	0.19	0.12	0.11	0.04	0.00	0.75
Avail Cap(c_a), veh/h	724	2329	881	574	1105	1163	245	365	309	349	0	284
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.98	0.98	0.98	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.7	7.2	5.8	6.5	0.0	0.0	41.0	41.4	41.3	41.8	0.0	45.1
Incr Delay (d2), s/veh	0.2	0.3	0.0	0.0	0.7	0.6	0.7	0.3	0.3	0.1	0.0	9.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	2.9	0.1	0.1	0.2	0.2	0.6	0.5	0.4	0.2	0.0	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.9	7.6	5.9	6.5	0.7	0.6	41.6	41.7	41.6	41.9	0.0	54.7
LnGrp LOS	A	A	A	A	A	A	D	D	D	D	A	D
Approach Vol, veh/h		868			679			64			93	
Approach Delay, s/veh		7.2			0.8			41.7			53.8	
Approach LOS		A			A			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	68.2	8.1	13.3	7.0	71.6	6.4	15.0
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	9.5	39.5	9.5	19.5	9.5	39.5	9.5	19.5
Max Q Clear Time (g_c+I1), s	4.7	2.0	3.5	7.8	2.3	10.6	2.4	3.1
Green Ext Time (p_c), s	0.1	8.5	0.0	0.3	0.0	9.9	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	8.5
HCM 6th LOS	A

Notes

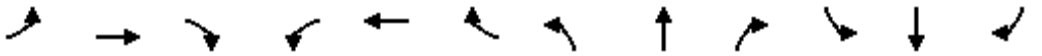
User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	16	641	14	42	575	51	21	38	24	7	7
Future Volume (vph)	16	641	14	42	575	51	21	38	24	7	7
Lane Group Flow (vph)	17	697	15	46	649	55	23	41	26	8	8
Turn Type	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2	3	8		7	4	
Permitted Phases	6		6	2		8		8	4		4
Detector Phase	1	6	6	5	2	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	5.0	6.0	6.0	5.0	6.0	6.0
Minimum Split (s)	15.0	25.5	25.5	15.0	25.5	15.0	35.5	35.5	15.0	41.5	41.5
Total Split (s)	15.0	50.0	50.0	15.0	50.0	15.0	20.0	20.0	15.0	20.0	20.0
Total Split (%)	15.0%	50.0%	50.0%	15.0%	50.0%	15.0%	20.0%	20.0%	15.0%	20.0%	20.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	None	None	None	None	None	None
v/c Ratio	0.04	0.27	0.02	0.08	0.25	0.35	0.16	0.16	0.15	0.07	0.03
Control Delay	5.1	6.6	0.0	5.0	7.5	42.0	45.1	1.4	36.2	45.4	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.1	6.6	0.0	5.0	7.5	42.0	45.1	1.4	36.2	45.4	0.3
Queue Length 50th (ft)	2	72	0	5	40	34	14	0	16	5	0
Queue Length 95th (ft)	10	91	0	21	153	62	39	0	36	20	0
Internal Link Dist (ft)		1634			1177		418			1048	
Turn Bay Length (ft)	365		330	380		100		135	85		125
Base Capacity (vph)	469	2541	894	598	2610	178	270	336	219	270	355
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.27	0.02	0.08	0.25	0.31	0.09	0.12	0.12	0.03	0.02

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 2: Lester Rd & Sigman Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	641	14	42	575	22	51	21	38	24	7	7
Future Volume (veh/h)	16	641	14	42	575	22	51	21	38	24	7	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1248	1870	1366	1826	1870	1870	1633	1870	1737	1870	1870	1870
Adj Flow Rate, veh/h	17	697	15	46	625	24	55	23	0	26	8	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	44	2	36	5	2	2	18	2	11	2	2	2
Cap, veh/h	407	2325	758	606	2343	90	191	120		184	89	
Arrive On Green	0.04	1.00	1.00	0.04	0.67	0.67	0.04	0.06	0.00	0.03	0.05	0.00
Sat Flow, veh/h	1188	3554	1158	1739	3489	134	1555	1870	1472	1781	1870	1585
Grp Volume(v), veh/h	17	697	15	46	318	331	55	23	0	26	8	0
Grp Sat Flow(s),veh/h/ln	1188	1777	1158	1739	1777	1846	1555	1870	1472	1781	1870	1585
Q Serve(g_s), s	0.5	0.0	0.0	0.8	7.2	7.2	3.3	1.2	0.0	1.4	0.4	0.0
Cycle Q Clear(g_c), s	0.5	0.0	0.0	0.8	7.2	7.2	3.3	1.2	0.0	1.4	0.4	0.0
Prop In Lane	1.00		1.00	1.00		0.07	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	407	2325	758	606	1193	1240	191	120		184	89	
V/C Ratio(X)	0.04	0.30	0.02	0.08	0.27	0.27	0.29	0.19		0.14	0.09	
Avail Cap(c_a), veh/h	498	2325	758	708	1193	1240	273	271		307	271	
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	5.5	0.0	0.0	4.9	6.6	6.6	43.0	44.4	0.0	43.6	45.5	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.1	0.5	0.5	0.8	0.8	0.0	0.3	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.0	0.3	2.5	2.6	1.3	0.6	0.0	0.6	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.5	0.3	0.0	5.0	7.1	7.1	43.8	45.1	0.0	43.9	46.0	0.0
LnGrp LOS	A	A	A	A	A	A	D	D		D	D	
Approach Vol, veh/h		729			695			78			34	
Approach Delay, s/veh		0.4			7.0			44.2			44.4	
Approach LOS		A			A			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.4	72.6	9.7	10.3	9.1	70.9	8.1	11.9
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	9.5	44.5	9.5	14.5	9.5	44.5	9.5	14.5
Max Q Clear Time (g_c+I1), s	2.5	9.2	5.3	2.4	2.8	2.0	3.4	3.2
Green Ext Time (p_c), s	0.0	8.6	0.0	0.0	0.0	10.9	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	6.6
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	27	17	8	10	22	16	3	96	14	2	71	5
Future Vol, veh/h	27	17	8	10	22	16	3	96	14	2	71	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	5	2	2	2	2	2	6	2
Mvmt Flow	31	19	9	11	25	18	3	109	16	2	81	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	233	219	84	225	214	117	87	0	0	125	0	0
Stage 1	88	88	-	123	123	-	-	-	-	-	-	-
Stage 2	145	131	-	102	91	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.55	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.045	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	722	679	975	730	678	935	1509	-	-	1462	-	-
Stage 1	920	822	-	881	788	-	-	-	-	-	-	-
Stage 2	858	788	-	904	814	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	687	677	975	706	676	935	1509	-	-	1462	-	-
Mov Cap-2 Maneuver	687	677	-	706	676	-	-	-	-	-	-	-
Stage 1	918	821	-	879	786	-	-	-	-	-	-	-
Stage 2	813	786	-	874	813	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.5	10.2	0.2	0.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1509	-	-	716	752	1462	-	-
HCM Lane V/C Ratio	0.002	-	-	0.083	0.073	0.002	-	-
HCM Control Delay (s)	7.4	0	-	10.5	10.2	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.2	0	-	-

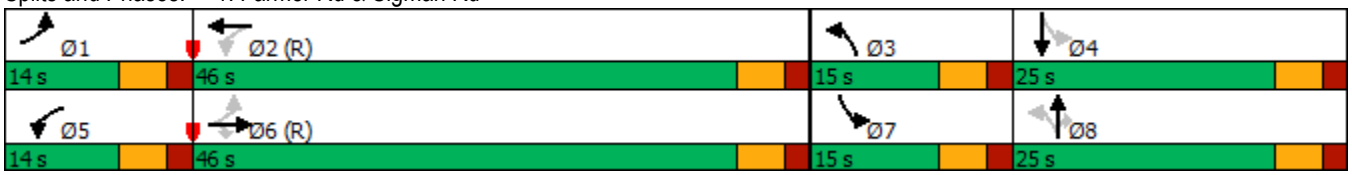
Future “No-Build” Intersection Analysis

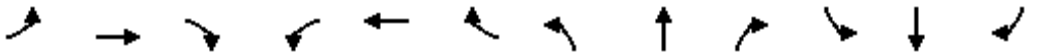
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	65	415	17	12	471	11	8	5	6	16
Future Volume (vph)	65	415	17	12	471	11	8	5	6	16
Lane Group Flow (vph)	71	456	19	13	520	12	9	5	7	139
Turn Type	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	1	6		5	2	3	8		7	4
Permitted Phases	6		6	2		8		8	4	
Detector Phase	1	6	6	5	2	3	8	8	7	4
Switch Phase										
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	5.0	6.0	6.0	5.0	6.0
Minimum Split (s)	15.0	33.5	33.5	15.0	30.5	15.0	37.5	37.5	15.0	41.5
Total Split (s)	14.0	46.0	46.0	14.0	46.0	15.0	25.0	25.0	15.0	25.0
Total Split (%)	14.0%	46.0%	46.0%	14.0%	46.0%	15.0%	25.0%	25.0%	15.0%	25.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	None	None	None	None	None
v/c Ratio	0.11	0.17	0.02	0.02	0.22	0.09	0.06	0.02	0.05	0.58
Control Delay	4.2	5.4	0.0	4.6	7.2	36.7	40.9	0.2	35.2	20.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.2	5.4	0.0	4.6	7.2	36.7	40.9	0.2	35.2	20.8
Queue Length 50th (ft)	6	22	0	1	54	7	6	0	4	11
Queue Length 95th (ft)	32	112	0	9	80	20	20	0	15	66
Internal Link Dist (ft)		598			1634		711			1203
Turn Bay Length (ft)	330		165	365		80		80	60	
Base Capacity (vph)	678	2637	1193	701	2339	179	363	380	203	410
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.17	0.02	0.02	0.22	0.07	0.02	0.01	0.03	0.34

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 105
Control Type: Actuated-Coordinated

Splits and Phases: 1: Farmer Rd & Sigman Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	415	17	12	471	2	11	8	5	6	16	110
Future Volume (veh/h)	65	415	17	12	471	2	11	8	5	6	16	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1811	1767	1841	1159	1767	1870	1604	1870	1870	1856
Adj Flow Rate, veh/h	71	456	19	13	518	2	12	9	5	7	18	121
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	4	4	6	9	4	50	9	2	20	2	2	3
Cap, veh/h	682	2251	988	610	2200	8	123	210	153	238	22	151
Arrive On Green	0.04	0.64	0.64	0.03	1.00	1.00	0.01	0.11	0.11	0.01	0.11	0.11
Sat Flow, veh/h	1753	3497	1535	1682	3573	14	1682	1870	1359	1781	209	1408
Grp Volume(v), veh/h	71	456	19	13	253	267	12	9	5	7	0	139
Grp Sat Flow(s),veh/h/ln	1753	1749	1535	1682	1749	1838	1682	1870	1359	1781	0	1617
Q Serve(g_s), s	1.4	5.3	0.4	0.3	0.0	0.0	0.6	0.4	0.3	0.3	0.0	8.4
Cycle Q Clear(g_c), s	1.4	5.3	0.4	0.3	0.0	0.0	0.6	0.4	0.3	0.3	0.0	8.4
Prop In Lane	1.00		1.00	1.00		0.01	1.00		1.00	1.00		0.87
Lane Grp Cap(c), veh/h	682	2251	988	610	1077	1132	123	210	153	238	0	173
V/C Ratio(X)	0.10	0.20	0.02	0.02	0.24	0.24	0.10	0.04	0.03	0.03	0.00	0.80
Avail Cap(c_a), veh/h	755	2251	988	727	1077	1132	259	365	265	391	0	315
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.99	0.99	0.99	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.1	7.3	6.4	6.8	0.0	0.0	39.2	39.6	39.5	39.2	0.0	43.6
Incr Delay (d2), s/veh	0.1	0.2	0.0	0.0	0.5	0.5	0.3	0.1	0.1	0.0	0.0	8.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.8	0.1	0.1	0.2	0.2	0.3	0.2	0.1	0.2	0.0	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.1	7.5	6.5	6.8	0.5	0.5	39.6	39.7	39.6	39.3	0.0	52.0
LnGrp LOS	A	A	A	A	A	A	D	D	D	D	A	D
Approach Vol, veh/h		546			533			26			146	
Approach Delay, s/veh		7.3			0.7			39.6			51.4	
Approach LOS		A			A			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	67.1	6.9	16.2	7.0	69.9	6.4	16.7
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	8.5	40.5	9.5	19.5	8.5	40.5	9.5	19.5
Max Q Clear Time (g_c+I1), s	3.4	2.0	2.6	10.4	2.3	7.3	2.3	2.4
Green Ext Time (p_c), s	0.0	6.3	0.0	0.4	0.0	6.2	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	10.3
HCM 6th LOS	B

Notes

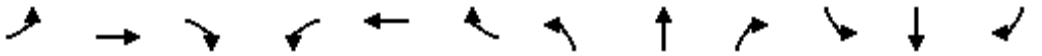
User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	7	405	15	8	462	5	3	10	4	8	10
Future Volume (vph)	7	405	15	8	462	5	3	10	4	8	10
Lane Group Flow (vph)	7	418	15	8	487	5	3	10	4	8	10
Turn Type	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2	3	8		7	4	
Permitted Phases	6		6	2		8		8	4		4
Detector Phase	1	6	6	5	2	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	5.0	6.0	6.0	5.0	6.0	6.0
Minimum Split (s)	15.0	25.5	25.5	15.0	25.5	15.0	35.5	35.5	15.0	41.5	41.5
Total Split (s)	15.0	50.0	50.0	15.0	50.0	15.0	20.0	20.0	15.0	20.0	20.0
Total Split (%)	15.0%	50.0%	50.0%	15.0%	50.0%	15.0%	20.0%	20.0%	15.0%	20.0%	20.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	None	None	None	None	None	None
v/c Ratio	0.01	0.14	0.01	0.01	0.16	0.06	0.03	0.05	0.03	0.07	0.04
Control Delay	3.1	2.9	0.0	3.2	3.5	39.2	43.7	0.4	38.8	45.0	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	3.1	2.9	0.0	3.2	3.5	39.2	43.7	0.4	38.8	45.0	0.4
Queue Length 50th (ft)	0	0	0	0	0	3	2	0	3	5	0
Queue Length 95th (ft)	5	62	0	6	103	13	11	0	12	19	1
Internal Link Dist (ft)		1634			1177		418			1048	
Turn Bay Length (ft)	365		330	380		100		135	85		125
Base Capacity (vph)	672	3058	1203	896	3095	126	270	305	195	270	338
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.14	0.01	0.01	0.16	0.04	0.01	0.03	0.02	0.03	0.03

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 2: Lester Rd & Sigman Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	405	15	8	462	11	5	3	10	4	8	10
Future Volume (veh/h)	7	405	15	8	462	11	5	3	10	4	8	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1470	1841	1604	1870	1870	1633	1011	1870	1455	1870	1870	1752
Adj Flow Rate, veh/h	7	418	15	8	476	11	5	3	0	4	8	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	29	4	20	2	2	18	60	2	30	2	2	10
Cap, veh/h	588	2599	1010	800	2642	61	91	41		110	38	
Arrive On Green	0.02	1.00	1.00	0.01	0.74	0.74	0.01	0.02	0.00	0.01	0.02	0.00
Sat Flow, veh/h	1400	3497	1359	1781	3550	82	963	1870	1233	1781	1870	1485
Grp Volume(v), veh/h	7	418	15	8	238	249	5	3	0	4	8	0
Grp Sat Flow(s),veh/h/ln	1400	1749	1359	1781	1777	1856	963	1870	1233	1781	1870	1485
Q Serve(g_s), s	0.1	0.0	0.0	0.1	4.0	4.0	0.5	0.2	0.0	0.2	0.4	0.0
Cycle Q Clear(g_c), s	0.1	0.0	0.0	0.1	4.0	4.0	0.5	0.2	0.0	0.2	0.4	0.0
Prop In Lane	1.00		1.00	1.00		0.04	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	588	2599	1010	800	1322	1381	91	41		110	38	
V/C Ratio(X)	0.01	0.16	0.01	0.01	0.18	0.18	0.06	0.07		0.04	0.21	
Avail Cap(c_a), veh/h	708	2599	1010	951	1322	1381	176	271		270	271	
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.99	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	3.1	0.0	0.0	3.1	3.8	3.8	47.6	47.9	0.0	47.6	48.2	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.3	0.3	0.3	0.8	0.0	0.1	2.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	1.2	1.3	0.1	0.1	0.0	0.1	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.1	0.1	0.0	3.1	4.1	4.1	47.8	48.7	0.0	47.7	50.9	0.0
LnGrp LOS	A	A	A	A	A	A	D	D		D	D	
Approach Vol, veh/h		440			495			8			12	
Approach Delay, s/veh		0.2			4.1			48.2			49.8	
Approach LOS		A			A			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.4	79.9	6.1	7.5	6.5	79.8	6.0	7.7
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	9.5	44.5	9.5	14.5	9.5	44.5	9.5	14.5
Max Q Clear Time (g_c+I1), s	2.1	6.0	2.5	2.4	2.1	2.0	2.2	2.2
Green Ext Time (p_c), s	0.0	6.2	0.0	0.0	0.0	5.9	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	3.2
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	10	8	2	10	6	5	42	8	4	133	10
Future Vol, veh/h	3	10	8	2	10	6	5	42	8	4	133	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	20	17	20	2	13	25	3	2
Mvmt Flow	3	11	9	2	11	7	5	46	9	4	146	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	230	225	152	231	226	51	157	0	0	55	0	0
Stage 1	160	160	-	61	61	-	-	-	-	-	-	-
Stage 2	70	65	-	170	165	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.7	6.37	4.3	-	-	4.35	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.7	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.7	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.18	3.453	2.38	-	-	2.425	-	-
Pot Cap-1 Maneuver	725	674	894	724	643	976	1320	-	-	1415	-	-
Stage 1	842	766	-	950	810	-	-	-	-	-	-	-
Stage 2	940	841	-	832	729	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	707	669	894	704	638	976	1320	-	-	1415	-	-
Mov Cap-2 Maneuver	707	669	-	704	638	-	-	-	-	-	-	-
Stage 1	839	764	-	946	807	-	-	-	-	-	-	-
Stage 2	917	838	-	810	727	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10	10.1	0.7	0.2
HCM LOS	B	B		

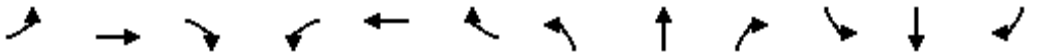
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1320	-	-	746	730	1415	-	-
HCM Lane V/C Ratio	0.004	-	-	0.031	0.027	0.003	-	-
HCM Control Delay (s)	7.7	0	-	10	10.1	7.6	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	126	661	18	12	617	24	20	15	6	7
Future Volume (vph)	126	661	18	12	617	24	20	15	6	7
Lane Group Flow (vph)	138	726	20	13	679	26	22	16	7	87
Turn Type	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	1	6		5	2	3	8		7	4
Permitted Phases	6		6	2		8		8	4	
Detector Phase	1	6	6	5	2	3	8	8	7	4
Switch Phase										
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	5.0	6.0	6.0	5.0	6.0
Minimum Split (s)	15.0	33.5	33.5	15.0	30.5	15.0	37.5	37.5	15.0	41.5
Total Split (s)	15.0	45.0	45.0	15.0	45.0	15.0	25.0	25.0	15.0	25.0
Total Split (%)	15.0%	45.0%	45.0%	15.0%	45.0%	15.0%	25.0%	25.0%	15.0%	25.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	None	None	None	None	None
v/c Ratio	0.24	0.27	0.02	0.03	0.30	0.17	0.11	0.05	0.04	0.46
Control Delay	5.4	6.5	0.1	5.2	8.7	36.2	39.2	0.3	32.3	20.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.4	6.5	0.1	5.2	8.7	36.2	39.2	0.3	32.3	20.0
Queue Length 50th (ft)	12	38	0	1	71	16	14	0	4	5
Queue Length 95th (ft)	55	184	0	m9	113	34	36	0	15	50
Internal Link Dist (ft)		598			1634		711			1203
Turn Bay Length (ft)	330		165	365		80		80	60	
Base Capacity (vph)	597	2701	1054	521	2229	190	369	431	219	371
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.27	0.02	0.02	0.30	0.14	0.06	0.04	0.03	0.23

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 105
Control Type: Actuated-Coordinated
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Farmer Rd & Sigman Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	661	18	12	617	1	24	20	15	6	7	72
Future Volume (veh/h)	126	661	18	12	617	1	24	20	15	6	7	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1856	1574	1604	1856	1870	1648	1870	1870	1870	1693	1856
Adj Flow Rate, veh/h	138	726	20	13	678	1	26	22	16	7	8	79
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	3	22	20	3	2	17	2	2	2	14	3
Cap, veh/h	636	2327	880	446	2262	3	136	180	152	196	11	105
Arrive On Green	0.05	0.66	0.66	0.03	1.00	1.00	0.03	0.10	0.10	0.01	0.08	0.08
Sat Flow, veh/h	1781	3526	1334	1527	3612	5	1570	1870	1585	1781	134	1321
Grp Volume(v), veh/h	138	726	20	13	331	348	26	22	16	7	0	87
Grp Sat Flow(s),veh/h/ln	1781	1763	1334	1527	1763	1855	1570	1870	1585	1781	0	1455
Q Serve(g_s), s	2.7	8.8	0.5	0.3	0.0	0.0	1.5	1.1	0.9	0.4	0.0	5.9
Cycle Q Clear(g_c), s	2.7	8.8	0.5	0.3	0.0	0.0	1.5	1.1	0.9	0.4	0.0	5.9
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		0.91
Lane Grp Cap(c), veh/h	636	2327	880	446	1104	1161	136	180	152	196	0	115
V/C Ratio(X)	0.22	0.31	0.02	0.03	0.30	0.30	0.19	0.12	0.11	0.04	0.00	0.76
Avail Cap(c_a), veh/h	718	2327	880	567	1104	1161	245	365	309	350	0	284
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.98	0.98	0.98	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.7	7.3	5.9	6.5	0.0	0.0	40.9	41.3	41.3	41.7	0.0	45.1
Incr Delay (d2), s/veh	0.2	0.4	0.0	0.0	0.7	0.6	0.7	0.3	0.3	0.1	0.0	9.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	3.0	0.1	0.1	0.2	0.2	0.6	0.5	0.4	0.2	0.0	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.9	7.6	5.9	6.6	0.7	0.6	41.6	41.6	41.6	41.8	0.0	54.7
LnGrp LOS	A	A	A	A	A	A	D	D	D	D	A	D
Approach Vol, veh/h		884			692			64			94	
Approach Delay, s/veh		7.3			0.8			41.6			53.7	
Approach LOS		A			A			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	68.1	8.1	13.4	7.0	71.5	6.4	15.1
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	9.5	39.5	9.5	19.5	9.5	39.5	9.5	19.5
Max Q Clear Time (g_c+I1), s	4.7	2.0	3.5	7.9	2.3	10.8	2.4	3.1
Green Ext Time (p_c), s	0.1	8.7	0.0	0.3	0.0	10.1	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	8.5
HCM 6th LOS	A

Notes

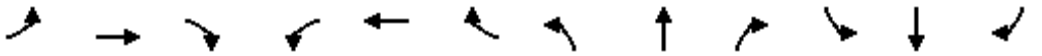
User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	16	654	14	43	587	52	21	39	24	7	7
Future Volume (vph)	16	654	14	43	587	52	21	39	24	7	7
Lane Group Flow (vph)	17	711	15	47	662	57	23	42	26	8	8
Turn Type	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2	3	8		7	4	
Permitted Phases	6		6	2		8		8	4		4
Detector Phase	1	6	6	5	2	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	5.0	6.0	6.0	5.0	6.0	6.0
Minimum Split (s)	15.0	25.5	25.5	15.0	25.5	15.0	35.5	35.5	15.0	41.5	41.5
Total Split (s)	15.0	50.0	50.0	15.0	50.0	15.0	20.0	20.0	15.0	20.0	20.0
Total Split (%)	15.0%	50.0%	50.0%	15.0%	50.0%	15.0%	20.0%	20.0%	15.0%	20.0%	20.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	None	None	None	None	None	None
v/c Ratio	0.04	0.28	0.02	0.09	0.25	0.36	0.16	0.17	0.15	0.07	0.03
Control Delay	5.1	6.6	0.0	5.0	7.5	42.3	45.1	1.5	36.2	45.4	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.1	6.6	0.0	5.0	7.5	42.3	45.1	1.5	36.2	45.4	0.3
Queue Length 50th (ft)	2	74	0	5	41	35	14	0	16	5	0
Queue Length 95th (ft)	10	93	0	21	157	64	39	0	36	20	0
Internal Link Dist (ft)		1634			1177		418			1048	
Turn Bay Length (ft)	365		330	380		100		135	85		125
Base Capacity (vph)	464	2540	894	590	2612	178	270	336	219	270	355
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.28	0.02	0.08	0.25	0.32	0.09	0.13	0.12	0.03	0.02

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 2: Lester Rd & Sigman Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	654	14	43	587	22	52	21	39	24	7	7
Future Volume (veh/h)	16	654	14	43	587	22	52	21	39	24	7	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1248	1870	1366	1826	1870	1870	1633	1870	1737	1870	1870	1870
Adj Flow Rate, veh/h	17	711	15	47	638	24	57	23	0	26	8	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	44	2	36	5	2	2	18	2	11	2	2	2
Cap, veh/h	402	2318	755	599	2339	88	193	123		184	89	
Arrive On Green	0.04	1.00	1.00	0.04	0.67	0.67	0.04	0.07	0.00	0.03	0.05	0.00
Sat Flow, veh/h	1188	3554	1158	1739	3492	131	1555	1870	1472	1781	1870	1585
Grp Volume(v), veh/h	17	711	15	47	324	338	57	23	0	26	8	0
Grp Sat Flow(s),veh/h/ln	1188	1777	1158	1739	1777	1847	1555	1870	1472	1781	1870	1585
Q Serve(g_s), s	0.5	0.0	0.0	0.9	7.4	7.4	3.5	1.2	0.0	1.4	0.4	0.0
Cycle Q Clear(g_c), s	0.5	0.0	0.0	0.9	7.4	7.4	3.5	1.2	0.0	1.4	0.4	0.0
Prop In Lane	1.00		1.00	1.00		0.07	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	402	2318	755	599	1190	1237	193	123		184	89	
V/C Ratio(X)	0.04	0.31	0.02	0.08	0.27	0.27	0.29	0.19		0.14	0.09	
Avail Cap(c_a), veh/h	492	2318	755	701	1190	1237	273	271		307	271	
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	5.5	0.0	0.0	5.0	6.7	6.7	42.9	44.2	0.0	43.6	45.5	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.1	0.6	0.5	0.8	0.7	0.0	0.3	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.0	0.3	2.6	2.7	1.4	0.6	0.0	0.6	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.6	0.3	0.0	5.0	7.2	7.2	43.7	44.9	0.0	43.9	46.0	0.0
LnGrp LOS	A	A	A	A	A	A	D	D		D	D	
Approach Vol, veh/h		743			709			80			34	
Approach Delay, s/veh		0.4			7.1			44.1			44.4	
Approach LOS		A			A			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.4	72.5	9.9	10.3	9.1	70.7	8.1	12.1
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	9.5	44.5	9.5	14.5	9.5	44.5	9.5	14.5
Max Q Clear Time (g_c+I1), s	2.5	9.4	5.5	2.4	2.9	2.0	3.4	3.2
Green Ext Time (p_c), s	0.0	8.8	0.0	0.0	0.0	11.2	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	6.6
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	28	17	8	10	22	16	3	98	14	2	72	5
Future Vol, veh/h	28	17	8	10	22	16	3	98	14	2	72	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	5	2	2	2	2	2	6	2
Mvmt Flow	32	19	9	11	25	18	3	111	16	2	82	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	236	222	85	228	217	119	88	0	0	127	0	0
Stage 1	89	89	-	125	125	-	-	-	-	-	-	-
Stage 2	147	133	-	103	92	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.55	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.045	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	718	677	974	727	676	933	1508	-	-	1459	-	-
Stage 1	918	821	-	879	787	-	-	-	-	-	-	-
Stage 2	856	786	-	903	813	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	683	675	974	703	674	933	1508	-	-	1459	-	-
Mov Cap-2 Maneuver	683	675	-	703	674	-	-	-	-	-	-	-
Stage 1	916	820	-	877	785	-	-	-	-	-	-	-
Stage 2	811	784	-	873	812	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.5	10.2	0.2	0.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1508	-	-	712	750	1459	-	-
HCM Lane V/C Ratio	0.002	-	-	0.085	0.073	0.002	-	-
HCM Control Delay (s)	7.4	0	-	10.5	10.2	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.2	0	-	-

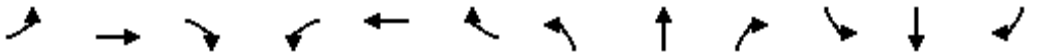
Future “Build” Intersections Analysis

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	108	415	17	12	471	11	10	5	6	18
Future Volume (vph)	108	415	17	12	471	11	10	5	6	18
Lane Group Flow (vph)	119	456	19	13	520	12	11	5	7	179
Turn Type	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	1	6		5	2	3	8		7	4
Permitted Phases	6		6	2		8		8	4	
Detector Phase	1	6	6	5	2	3	8	8	7	4
Switch Phase										
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	5.0	6.0	6.0	5.0	6.0
Minimum Split (s)	15.0	33.5	33.5	15.0	30.5	15.0	37.5	37.5	15.0	41.5
Total Split (s)	15.0	44.0	44.0	15.0	44.0	15.0	26.0	26.0	15.0	26.0
Total Split (%)	15.0%	44.0%	44.0%	15.0%	44.0%	15.0%	26.0%	26.0%	15.0%	26.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	None	None	None	None	None
v/c Ratio	0.18	0.17	0.02	0.02	0.24	0.09	0.07	0.02	0.04	0.64
Control Delay	4.5	5.6	0.0	4.6	7.8	36.1	40.5	0.2	34.5	20.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.5	5.6	0.0	4.6	7.8	36.1	40.5	0.2	34.5	20.2
Queue Length 50th (ft)	11	22	0	1	57	7	7	0	4	12
Queue Length 95th (ft)	51	115	0	8	72	20	23	0	14	74
Internal Link Dist (ft)		598			1634		711			1203
Turn Bay Length (ft)	330		165	365		80		80	60	
Base Capacity (vph)	680	2625	1188	700	2205	181	381	392	207	454
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.17	0.02	0.02	0.24	0.07	0.03	0.01	0.03	0.39

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 105
Control Type: Actuated-Coordinated

Splits and Phases: 1: Farmer Rd & Sigman Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	108	415	17	12	471	2	11	10	5	6	18	145
Future Volume (veh/h)	108	415	17	12	471	2	11	10	5	6	18	145
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1811	1767	1841	1159	1767	1870	1604	1870	1870	1856
Adj Flow Rate, veh/h	119	456	19	13	518	2	12	11	5	7	20	159
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	4	4	6	9	4	50	9	2	20	2	2	3
Cap, veh/h	664	2160	948	584	2089	8	124	259	188	274	24	191
Arrive On Green	0.05	0.62	0.62	0.03	1.00	1.00	0.01	0.14	0.14	0.01	0.13	0.13
Sat Flow, veh/h	1753	3497	1535	1682	3573	14	1682	1870	1359	1781	180	1432
Grp Volume(v), veh/h	119	456	19	13	253	267	12	11	5	7	0	179
Grp Sat Flow(s),veh/h/ln	1753	1749	1535	1682	1749	1838	1682	1870	1359	1781	0	1613
Q Serve(g_s), s	2.7	5.7	0.5	0.3	0.0	0.0	0.6	0.5	0.3	0.3	0.0	10.8
Cycle Q Clear(g_c), s	2.7	5.7	0.5	0.3	0.0	0.0	0.6	0.5	0.3	0.3	0.0	10.8
Prop In Lane	1.00		1.00	1.00		0.01	1.00		1.00	1.00		0.89
Lane Grp Cap(c), veh/h	664	2160	948	584	1022	1074	124	259	188	274	0	215
V/C Ratio(X)	0.18	0.21	0.02	0.02	0.25	0.25	0.10	0.04	0.03	0.03	0.00	0.83
Avail Cap(c_a), veh/h	746	2160	948	718	1022	1074	260	383	279	427	0	331
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.99	0.99	0.99	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.2	8.4	7.4	8.0	0.0	0.0	37.2	37.3	37.2	37.0	0.0	42.3
Incr Delay (d2), s/veh	0.1	0.2	0.0	0.0	0.6	0.5	0.3	0.1	0.1	0.0	0.0	10.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	2.0	0.2	0.1	0.2	0.2	0.3	0.2	0.1	0.1	0.0	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.4	8.6	7.4	8.0	0.6	0.5	37.5	37.4	37.3	37.0	0.0	52.6
LnGrp LOS	A	A	A	A	A	A	D	D	D	D	A	D
Approach Vol, veh/h		594			533			28			186	
Approach Delay, s/veh		8.3			0.7			37.4			52.1	
Approach LOS		A			A			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.3	64.0	6.9	18.8	7.0	67.3	6.4	19.3
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	9.5	38.5	9.5	20.5	9.5	38.5	9.5	20.5
Max Q Clear Time (g_c+I1), s	4.7	2.0	2.6	12.8	2.3	7.7	2.3	2.5
Green Ext Time (p_c), s	0.1	6.2	0.0	0.5	0.0	6.1	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	12.0
HCM 6th LOS	B

Notes

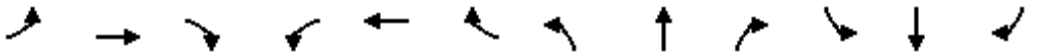
User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	7	405	15	8	462	5	11	10	12	14	10
Future Volume (vph)	7	405	15	8	462	5	11	10	12	14	10
Lane Group Flow (vph)	7	418	15	8	498	5	11	10	12	14	10
Turn Type	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2	3	8		7	4	
Permitted Phases	6		6	2		8		8	4		4
Detector Phase	1	6	6	5	2	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	5.0	6.0	6.0	5.0	6.0	6.0
Minimum Split (s)	15.0	25.5	25.5	15.0	25.5	15.0	35.5	35.5	15.0	41.5	41.5
Total Split (s)	15.0	44.0	44.0	15.0	44.0	15.0	26.0	26.0	15.0	26.0	26.0
Total Split (%)	15.0%	44.0%	44.0%	15.0%	44.0%	15.0%	26.0%	26.0%	15.0%	26.0%	26.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	None	None	None	None	None	None
v/c Ratio	0.01	0.14	0.01	0.01	0.16	0.06	0.09	0.05	0.09	0.12	0.04
Control Delay	3.3	3.1	0.0	3.4	3.6	38.8	45.4	0.4	39.1	45.6	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	3.3	3.1	0.0	3.4	3.6	38.8	45.4	0.4	39.1	45.6	0.3
Queue Length 50th (ft)	0	0	0	0	0	3	7	0	7	9	0
Queue Length 95th (ft)	5	70	0	6	106	13	25	0	22	28	0
Internal Link Dist (ft)		1634			1177		418			1048	
Turn Bay Length (ft)	365		330	380		100		135	85		125
Base Capacity (vph)	665	3051	1201	894	3065	126	381	371	198	381	417
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.14	0.01	0.01	0.16	0.04	0.03	0.03	0.06	0.04	0.02

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 2: Lester Rd & Sigman Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	405	15	8	462	21	5	11	10	12	14	10
Future Volume (veh/h)	7	405	15	8	462	21	5	11	10	12	14	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1470	1841	1604	1870	1870	1633	1011	1870	1455	1870	1870	1752
Adj Flow Rate, veh/h	7	418	15	8	476	22	5	11	0	12	14	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	29	4	20	2	2	18	60	2	30	2	2	10
Cap, veh/h	564	2525	981	779	2501	115	104	63		137	78	
Arrive On Green	0.02	1.00	1.00	0.01	0.72	0.72	0.01	0.03	0.00	0.01	0.04	0.00
Sat Flow, veh/h	1400	3497	1359	1781	3459	160	963	1870	1233	1781	1870	1485
Grp Volume(v), veh/h	7	418	15	8	244	254	5	11	0	12	14	0
Grp Sat Flow(s),veh/h/ln	1400	1749	1359	1781	1777	1842	963	1870	1233	1781	1870	1485
Q Serve(g_s), s	0.1	0.0	0.0	0.1	4.4	4.4	0.5	0.6	0.0	0.6	0.7	0.0
Cycle Q Clear(g_c), s	0.1	0.0	0.0	0.1	4.4	4.4	0.5	0.6	0.0	0.6	0.7	0.0
Prop In Lane	1.00		1.00	1.00		0.09	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	564	2525	981	779	1285	1332	104	63		137	78	
V/C Ratio(X)	0.01	0.17	0.02	0.01	0.19	0.19	0.05	0.17		0.09	0.18	
Avail Cap(c_a), veh/h	685	2525	981	931	1285	1332	189	383		281	383	
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.99	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	3.7	0.0	0.0	3.6	4.4	4.4	46.3	46.9	0.0	45.6	46.3	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.3	0.3	0.2	1.3	0.0	0.3	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	1.4	1.5	0.1	0.3	0.0	0.3	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.7	0.1	0.0	3.6	4.8	4.8	46.5	48.2	0.0	45.9	47.4	0.0
LnGrp LOS	A	A	A	A	A	A	D	D		D	D	
Approach Vol, veh/h		440			506			16			26	
Approach Delay, s/veh		0.2			4.8			47.7			46.7	
Approach LOS		A			A			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.4	77.8	6.1	9.7	6.5	77.7	6.9	8.9
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	9.5	38.5	9.5	20.5	9.5	38.5	9.5	20.5
Max Q Clear Time (g_c+I1), s	2.1	6.4	2.5	2.7	2.1	2.0	2.6	2.6
Green Ext Time (p_c), s	0.0	6.1	0.0	0.0	0.0	5.8	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	4.5
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	3	19	30	2	21	13	32	60	8	10	148	10
Future Vol, veh/h	3	19	30	2	21	13	32	60	8	10	148	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	20	17	20	2	13	25	3	2
Mvmt Flow	3	21	33	2	23	14	35	66	9	11	163	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	350	336	169	359	337	71	174	0	0	75	0	0
Stage 1	191	191	-	141	141	-	-	-	-	-	-	-
Stage 2	159	145	-	218	196	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.7	6.37	4.3	-	-	4.35	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.7	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.7	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.18	3.453	2.38	-	-	2.425	-	-
Pot Cap-1 Maneuver	605	585	875	596	556	951	1301	-	-	1390	-	-
Stage 1	811	742	-	862	747	-	-	-	-	-	-	-
Stage 2	843	777	-	784	706	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	560	563	875	542	535	951	1301	-	-	1390	-	-
Mov Cap-2 Maneuver	560	563	-	542	535	-	-	-	-	-	-	-
Stage 1	788	735	-	838	726	-	-	-	-	-	-	-
Stage 2	781	755	-	726	700	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.5	11	2.5	0.5
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1301	-	-	709	636	1390	-	-
HCM Lane V/C Ratio	0.027	-	-	0.081	0.062	0.008	-	-
HCM Control Delay (s)	7.8	0	-	10.5	11	7.6	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.2	0	-	-

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	21	26	38	31	1
Future Vol, veh/h	1	21	26	38	31	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	150	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	23	28	41	34	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	69	0	-	0	53	28
Stage 1	-	-	-	-	28	-
Stage 2	-	-	-	-	25	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1532	-	-	-	955	1047
Stage 1	-	-	-	-	995	-
Stage 2	-	-	-	-	998	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1532	-	-	-	954	1047
Mov Cap-2 Maneuver	-	-	-	-	954	-
Stage 1	-	-	-	-	994	-
Stage 2	-	-	-	-	998	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1532	-	-	-	957
HCM Lane V/C Ratio	0.001	-	-	-	0.036
HCM Control Delay (s)	7.4	0	-	-	8.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	21	25	51	147	6
Future Vol, veh/h	5	21	25	51	147	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	23	27	55	160	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	273	164	167	0	-	0
Stage 1	164	-	-	-	-	-
Stage 2	109	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	716	881	1411	-	-	-
Stage 1	865	-	-	-	-	-
Stage 2	916	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	702	881	1411	-	-	-
Mov Cap-2 Maneuver	702	-	-	-	-	-
Stage 1	848	-	-	-	-	-
Stage 2	916	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.4	2.5	0
HCM LOS	A		

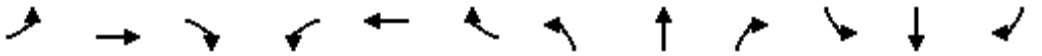
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1411	-	840	-	-
HCM Lane V/C Ratio	0.019	-	0.034	-	-
HCM Control Delay (s)	7.6	0	9.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	146	661	18	12	617	24	21	15	6	9
Future Volume (vph)	146	661	18	12	617	24	21	15	6	9
Lane Group Flow (vph)	160	726	20	13	679	26	23	16	7	140
Turn Type	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	1	6		5	2	3	8		7	4
Permitted Phases	6		6	2		8		8	4	
Detector Phase	1	6	6	5	2	3	8	8	7	4
Switch Phase										
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	5.0	6.0	6.0	5.0	6.0
Minimum Split (s)	15.0	33.5	33.5	15.0	30.5	15.0	37.5	37.5	15.0	41.5
Total Split (s)	15.0	44.0	44.0	15.0	44.0	15.0	26.0	26.0	15.0	26.0
Total Split (%)	15.0%	44.0%	44.0%	15.0%	44.0%	15.0%	26.0%	26.0%	15.0%	26.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	None	None	None	None	None
v/c Ratio	0.28	0.28	0.02	0.03	0.32	0.18	0.11	0.05	0.04	0.57
Control Delay	6.1	7.1	0.1	5.2	9.0	35.8	38.5	0.3	31.5	19.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.1	7.1	0.1	5.2	9.0	35.8	38.5	0.3	31.5	19.0
Queue Length 50th (ft)	14	39	0	1	60	16	14	0	4	6
Queue Length 95th (ft)	66	191	0	8	100	33	36	0	14	61
Internal Link Dist (ft)		598			1634		711			1203
Turn Bay Length (ft)	330		165	365		80		80	60	
Base Capacity (vph)	578	2565	1008	502	2118	182	386	445	226	426
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.28	0.02	0.03	0.32	0.14	0.06	0.04	0.03	0.33

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 105
Control Type: Actuated-Coordinated

Splits and Phases: 1: Farmer Rd & Sigman Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	146	661	18	12	617	1	24	21	15	6	9	118
Future Volume (veh/h)	146	661	18	12	617	1	24	21	15	6	9	118
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1856	1574	1604	1856	1870	1648	1870	1870	1870	1693	1856
Adj Flow Rate, veh/h	160	726	20	13	678	1	26	23	16	7	10	130
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	3	22	20	3	2	17	2	2	2	14	3
Cap, veh/h	613	2190	829	416	2096	3	138	252	214	249	12	159
Arrive On Green	0.06	0.62	0.62	0.03	1.00	1.00	0.03	0.13	0.13	0.01	0.12	0.12
Sat Flow, veh/h	1781	3526	1334	1527	3612	5	1570	1870	1585	1781	104	1347
Grp Volume(v), veh/h	160	726	20	13	331	348	26	23	16	7	0	140
Grp Sat Flow(s),veh/h/ln	1781	1763	1334	1527	1763	1855	1570	1870	1585	1781	0	1450
Q Serve(g_s), s	3.5	9.8	0.6	0.3	0.0	0.0	1.4	1.1	0.9	0.3	0.0	9.4
Cycle Q Clear(g_c), s	3.5	9.8	0.6	0.3	0.0	0.0	1.4	1.1	0.9	0.3	0.0	9.4
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		0.93
Lane Grp Cap(c), veh/h	613	2190	829	416	1023	1076	138	252	214	249	0	171
V/C Ratio(X)	0.26	0.33	0.02	0.03	0.32	0.32	0.19	0.09	0.07	0.03	0.00	0.82
Avail Cap(c_a), veh/h	683	2190	829	538	1023	1076	247	383	325	403	0	297
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.97	0.97	0.97	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.0	9.0	7.3	8.3	0.0	0.0	37.7	37.9	37.8	38.3	0.0	43.1
Incr Delay (d2), s/veh	0.2	0.4	0.1	0.0	0.8	0.8	0.6	0.2	0.1	0.0	0.0	9.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	3.5	0.2	0.1	0.2	0.2	0.6	0.5	0.3	0.2	0.0	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.3	9.4	7.3	8.3	0.8	0.8	38.4	38.0	38.0	38.3	0.0	52.2
LnGrp LOS	A	A	A	A	A	A	D	D	D	D	A	D
Approach Vol, veh/h		906			692			65			147	
Approach Delay, s/veh		9.0			0.9			38.2			51.6	
Approach LOS		A			A			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	63.5	8.1	17.3	7.0	67.6	6.4	19.0
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	9.5	38.5	9.5	20.5	9.5	38.5	9.5	20.5
Max Q Clear Time (g_c+I1), s	5.5	2.0	3.4	11.4	2.3	11.8	2.3	3.1
Green Ext Time (p_c), s	0.1	8.6	0.0	0.4	0.0	9.7	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	10.4
HCM 6th LOS	B

Notes

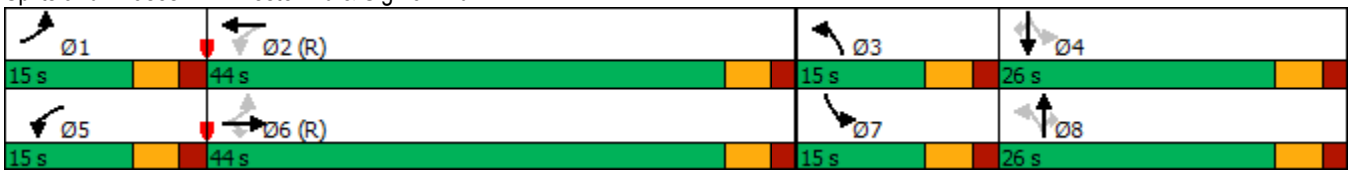
User approved pedestrian interval to be less than phase max green.

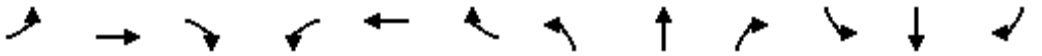
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	16	654	14	43	587	52	25	39	34	15	7
Future Volume (vph)	16	654	14	43	587	52	25	39	34	15	7
Lane Group Flow (vph)	17	711	15	47	666	57	27	42	37	16	8
Turn Type	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2	3	8		7	4	
Permitted Phases	6		6	2		8		8	4		4
Detector Phase	1	6	6	5	2	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	5.0	6.0	6.0	5.0	6.0	6.0
Minimum Split (s)	15.0	25.5	25.5	15.0	25.5	15.0	35.5	35.5	15.0	41.5	41.5
Total Split (s)	15.0	44.0	44.0	15.0	44.0	15.0	26.0	26.0	15.0	26.0	26.0
Total Split (%)	15.0%	44.0%	44.0%	15.0%	44.0%	15.0%	26.0%	26.0%	15.0%	26.0%	26.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	None	None	None	None	None	None
v/c Ratio	0.04	0.29	0.02	0.09	0.26	0.30	0.19	0.17	0.20	0.13	0.03
Control Delay	6.4	8.5	0.1	5.9	8.5	37.6	46.1	1.5	36.6	45.4	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.4	8.5	0.1	5.9	8.5	37.6	46.1	1.5	36.6	45.4	0.3
Queue Length 50th (ft)	3	87	0	8	74	30	17	0	22	10	0
Queue Length 95th (ft)	11	115	0	22	163	63	43	0	45	30	m0
Internal Link Dist (ft)		1634			1177		418			1048	
Turn Bay Length (ft)	365		330	380		100		135	85		125
Base Capacity (vph)	445	2446	866	567	2521	207	381	415	227	381	441
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.29	0.02	0.08	0.26	0.28	0.07	0.10	0.16	0.04	0.02

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Lester Rd & Sigman Rd





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	654	14	43	587	26	52	25	39	34	15	7
Future Volume (veh/h)	16	654	14	43	587	26	52	25	39	34	15	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1248	1870	1366	1826	1870	1870	1633	1870	1737	1870	1870	1870
Adj Flow Rate, veh/h	17	711	15	47	638	28	57	27	0	37	16	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	44	2	36	5	2	2	18	2	11	2	2	2
Cap, veh/h	397	2298	749	595	2303	101	195	121		200	100	
Arrive On Green	0.04	1.00	1.00	0.04	0.66	0.66	0.04	0.06	0.00	0.03	0.05	0.00
Sat Flow, veh/h	1188	3554	1158	1739	3468	152	1555	1870	1472	1781	1870	1585
Grp Volume(v), veh/h	17	711	15	47	327	339	57	27	0	37	16	0
Grp Sat Flow(s),veh/h/ln	1188	1777	1158	1739	1777	1843	1555	1870	1472	1781	1870	1585
Q Serve(g_s), s	0.5	0.0	0.0	0.9	7.6	7.6	3.4	1.4	0.0	1.9	0.8	0.0
Cycle Q Clear(g_c), s	0.5	0.0	0.0	0.9	7.6	7.6	3.4	1.4	0.0	1.9	0.8	0.0
Prop In Lane	1.00		1.00	1.00		0.08	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	397	2298	749	595	1180	1224	195	121		200	100	
V/C Ratio(X)	0.04	0.31	0.02	0.08	0.28	0.28	0.29	0.22		0.19	0.16	
Avail Cap(c_a), veh/h	487	2298	749	697	1180	1224	275	383		312	383	
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	5.7	0.0	0.0	5.2	6.9	6.9	42.3	44.4	0.0	42.7	45.2	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.1	0.6	0.6	0.8	0.9	0.0	0.4	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.0	0.3	2.7	2.8	1.3	0.7	0.0	0.9	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.8	0.3	0.0	5.2	7.5	7.5	43.2	45.3	0.0	43.1	45.9	0.0
LnGrp LOS	A	A	A	A	A	A	D	D		D	D	
Approach Vol, veh/h		743			713			84			53	
Approach Delay, s/veh		0.5			7.3			43.8			44.0	
Approach LOS		A			A			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.4	71.9	9.8	10.8	9.1	70.2	8.7	12.0
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Max Green Setting (Gmax), s	9.5	38.5	9.5	20.5	9.5	38.5	9.5	20.5
Max Q Clear Time (g_c+I1), s	2.5	9.6	5.4	2.8	2.9	2.0	3.9	3.4
Green Ext Time (p_c), s	0.0	8.4	0.0	0.0	0.0	10.7	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	7.3
HCM 6th LOS	A

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	28	28	37	10	27	19	15	106	14	9	91	5
Future Vol, veh/h	28	28	37	10	27	19	15	106	14	9	91	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	5	2	2	2	2	2	6	2
Mvmt Flow	32	32	42	11	31	22	17	120	16	10	103	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	315	296	106	325	291	128	109	0	0	136	0	0
Stage 1	126	126	-	162	162	-	-	-	-	-	-	-
Stage 2	189	170	-	163	129	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.55	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.045	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	638	616	948	628	614	922	1481	-	-	1448	-	-
Stage 1	878	792	-	840	758	-	-	-	-	-	-	-
Stage 2	813	758	-	839	784	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	590	604	948	568	602	922	1481	-	-	1448	-	-
Mov Cap-2 Maneuver	590	604	-	568	602	-	-	-	-	-	-	-
Stage 1	867	786	-	830	749	-	-	-	-	-	-	-
Stage 2	752	749	-	764	779	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.1	10.9	0.8	0.6
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1481	-	-	700	674	1448	-	-
HCM Lane V/C Ratio	0.012	-	-	0.151	0.094	0.007	-	-
HCM Control Delay (s)	7.5	0	-	11.1	10.9	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.5	0.3	0	-	-

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	53	31	17	40	1
Future Vol, veh/h	1	53	31	17	40	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	150	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	58	34	18	43	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	52	0	-	0	94	34
Stage 1	-	-	-	-	34	-
Stage 2	-	-	-	-	60	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1554	-	-	-	906	1039
Stage 1	-	-	-	-	988	-
Stage 2	-	-	-	-	963	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1554	-	-	-	905	1039
Mov Cap-2 Maneuver	-	-	-	-	905	-
Stage 1	-	-	-	-	987	-
Stage 2	-	-	-	-	963	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1554	-	-	-	908
HCM Lane V/C Ratio	0.001	-	-	-	0.049
HCM Control Delay (s)	7.3	0	-	-	9.2
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	27	12	142	80	3
Future Vol, veh/h	6	27	12	142	80	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	29	13	154	87	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	269	89	90	0	-	0
Stage 1	89	-	-	-	-	-
Stage 2	180	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	720	969	1505	-	-	-
Stage 1	934	-	-	-	-	-
Stage 2	851	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	714	969	1505	-	-	-
Mov Cap-2 Maneuver	714	-	-	-	-	-
Stage 1	926	-	-	-	-	-
Stage 2	851	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	0.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1505	-	910	-	-
HCM Lane V/C Ratio	0.009	-	0.039	-	-
HCM Control Delay (s)	7.4	0	9.1	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Traffic Volume Worksheets

23-212 - Farmer Road Data Center, Rockdale County
Traffic Volumes

A&R Engineering
April 2024

1. Sigman Rd @ Farmer Rd

A.M. Peak Hour

	Farmer Road Northbound					Farmer Road Southbound					Sigman Road Eastbound					Sigman Road Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	0	11	8	5	24	0	6	16	108	130	11	53	407	17	488	1	11	462	2	476
Growth Factor (%):	1	1	1	1		1	1	1	1		1	1	1	1		1	1	1	1	
No-Build 2024 Volumes:	0	11	8	5	24	0	6	16	110	132	11	54	415	17	497	1	11	471	2	485
Total New Trips:	0	0	2	0	2	0	0	2	35	37	0	43	0	0	43	0	0	0	0	0
Future 2026 Traffic Volumes:	0	11	10	5	26	0	6	18	145	169	11	97	415	17	540	1	11	471	2	485

P.M. Peak Hour

	Farmer Road Northbound					Farmer Road Southbound					Sigman Road Eastbound					Sigman Road Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	0	24	20	15	59	0	6	7	71	84	18	106	648	18	790	2	10	605	1	618
Growth Factor (%):	1	1	1	1		1	1	1	1		1	1	1	1		1	1	1	1	
No-Build 2024 Volumes:	0	24	20	15	59	0	6	7	72	85	18	108	661	18	805	2	10	617	1	630
Total New Trips:	0	0	1	0	1	0	0	2	46	48	0	20	0	0	20	0	0	0	0	0
Future 2026 Traffic Volumes:	0	24	21	15	60	0	6	9	118	133	18	128	661	18	825	2	10	617	1	630

Number of Years = 2 (2024-2026)
Growth Factor (%) = 1

23-212 - Farmer Road Data Center, Rockdale County
Traffic Volumes

A&R Engineering
April 2024

2. Sigman Rd @ Lester Rd

A.M. Peak Hour

	Lester Road Northbound					Lester Road Southbound					Sigman Road Eastbound					Sigman Road Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	0	5	3	10	18	0	4	8	10	22	0	7	397	15	419	0	8	453	11	472
Growth Factor (%):	1	1	1	1		1	1	1	1		1	1	1	1		1	1	1	1	
No-Build 2024 Volumes:	0	5	3	10	18	0	4	8	10	22	0	7	405	15	427	0	8	462	11	481
Total New Trips:	0	0	8	0	8	0	8	6	0	14	0	0	0	0	0	0	0	0	10	10
Future 2026 Traffic Volumes:	0	5	11	10	26	0	12	14	10	36	0	7	405	15	427	0	8	462	21	491

P.M. Peak Hour

	Lester Road Northbound					Lester Road Southbound					Sigman Road Eastbound					Sigman Road Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	0	51	21	38	110	0	24	7	7	38	0	16	641	14	671	0	42	575	22	639
Growth Factor (%):	1	1	1	1		1	1	1	1		1	1	1	1		1	1	1	1	
No-Build 2024 Volumes:	0	52	21	39	112	0	24	7	7	38	0	16	654	14	684	0	43	587	22	652
Total New Trips:	0	0	4	0	4	0	10	8	0	18	0	0	0	0	0	0	0	0	4	4
Future 2026 Traffic Volumes:	0	52	25	39	116	0	34	15	7	56	0	16	654	14	684	0	43	587	26	656

Number of Years = 2 (2024-2026)
Growth Factor (%) = 1

23-212 - Farmer Road Data Center, Rockdale County
Traffic Volumes

A&R Engineering
April 2024

3. Farmer Rd @ Lester Rd

A.M. Peak Hour

	Farmer Road Northbound					Farmer Road Southbound					Lester Road Eastbound					Lester Road Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	0	5	41	8	54	0	4	130	10	144	0	3	10	8	21	0	2	10	6	18
Growth Factor (%):	1	1	1	1		1	1	1	1		1	1	1	1		1	1	1	1	
No-Build 2024 Volumes:	0	5	42	8	55	0	4	133	10	147	0	3	10	8	21	0	2	10	6	18
Total New Trips:	0	27	18	0	45	0	6	15	0	21	0	0	9	22	31	0	0	11	7	18
Future 2026 Traffic Volumes:	0	32	60	8	100	0	10	148	10	168	0	3	19	30	52	0	2	21	13	36

P.M. Peak Hour

	Farmer Road Northbound					Farmer Road Southbound					Lester Road Eastbound					Lester Road Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	0	3	96	14	113	0	2	71	5	78	0	27	17	8	52	0	10	22	16	48
Growth Factor (%):	1	1	1	1		1	1	1	1		1	1	1	1		1	1	1	1	
No-Build 2024 Volumes:	0	3	98	14	115	0	2	72	5	79	0	28	17	8	53	0	10	22	16	48
Total New Trips:	0	12	8	0	20	0	7	19	0	26	0	0	11	29	40	0	0	5	3	8
Future 2026 Traffic Volumes:	0	15	106	14	135	0	9	91	5	105	0	28	28	37	93	0	10	27	19	56

Number of Years = 2 (2024-2026)
Growth Factor (%) = 1

23-212 - Farmer Road Data Center, Rockdale County
Traffic Volumes

A&R Engineering
April 2024

4. Lester Rd @ Site Drwy 1

A.M. Peak Hour

	- Northbound					Site Driveway 1 Southbound					Lester Road Eastbound					Lester Road Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	0	0	0	0	0	0	0	0	0	0	0	0	21	0	21	0	0	25	0	25
Growth Factor (%):	1	1	1	1		1	1	1	1		1	1	1	1		1	1	1	1	
No-Build 2024 Volumes:	0	0	0	0	0	0	0	0	0	0	0	0	21	0	21	0	0	26	0	26
Total New Trips:	0	0	0	0	0	0	31	0	1	32	0	1	0	0	1	0	0	0	38	38
Future 2026 Traffic Volumes:	0	0	0	0	0	0	31	0	1	32	0	1	21	0	22	0	0	26	38	64

P.M. Peak Hour

	- Northbound					Site Driveway 1 Southbound					Lester Road Eastbound					Lester Road Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	0	0	0	0	0	0	0	0	0	0	0	0	52	0	52	0	0	30	0	30
Growth Factor (%):	1	1	1	1		1	1	1	1		1	1	1	1		1	1	1	1	
No-Build 2024 Volumes:	0	0	0	0	0	0	0	0	0	0	0	0	53	0	53	0	0	31	0	31
Total New Trips:	0	0	0	0	0	0	40	0	1	41	0	1	0	0	1	0	0	0	17	17
Future 2026 Traffic Volumes:	0	0	0	0	0	0	40	0	1	41	0	1	53	0	54	0	0	31	17	48

Number of Years = 2 (2024-2026)
Growth Factor (%) = 1

23-212 - Farmer Road Data Center, Rockdale County
Traffic Volumes

A&R Engineering
April 2024

5. Farmer Rd @ Site Drwy 2

A.M. Peak Hour

	Farmer Road Northbound					Farmer Road Southbound					Site Driveway 2 Eastbound					- Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	0	0	50	0	50	0	0	144	0	144	0	0	0	0	0	0	0	0	0	0
Growth Factor (%):	1	1	1	1		1	1	1	1		1	1	1	1		1	1	1	1	
No-Build 2024 Volumes:	0	0	51	0	51	0	0	147	0	147	0	0	0	0	0	0	0	0	0	0
Total New Trips:	0	25	0	0	25	0	0	0	6	6	0	5	0	21	26	0	0	0	0	0
Future 2026 Traffic Volumes:	0	25	51	0	76	0	0	147	6	153	0	5	0	21	26	0	0	0	0	0

P.M. Peak Hour

	Farmer Road Northbound					Farmer Road Southbound					Site Driveway 2 Eastbound					- Westbound				
Condition	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2024 Traffic Counts:	0	0	139	0	139	0	0	78	0	78	0	0	0	0	0	0	0	0	0	0
Growth Factor (%):	1	1	1	1		1	1	1	1		1	1	1	1		1	1	1	1	
No-Build 2024 Volumes:	0	0	142	0	142	0	0	80	0	80	0	0	0	0	0	0	0	0	0	0
Total New Trips:	0	12	0	0	12	0	0	0	3	3	0	6	0	27	33	0	0	0	0	0
Future 2026 Traffic Volumes:	0	12	142	0	154	0	0	80	3	83	0	6	0	27	33	0	0	0	0	0

Number of Years = 2 (2024-2026)
Growth Factor (%) = 1